



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

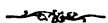
About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

Transferred to the
LIBRARY OF THE
UNIVERSITY OF WISCONSIN
KOHLER ART LIBRARY



*ILLUSTRATED BIOGRAPHIES OF
THE GREAT ARTISTS.*



LEONARDO DA VINCI.



ILLUSTRATED BIOGRAPHIES

OF

THE GREAT ARTISTS.

THE FOLLOWING ARE NOW READY :—

LEONARDO. From recent researches. By Dr. J. PAUL RICHTER,
Author of 'Die Mosaiken von Ravenna.' With 16 Illustrations.

THE FIGURE PAINTERS OF HOLLAND. By LORD
RONALD GOWER, Trustee of National Portrait Gallery. With 18 Engravings.

HOGARTH. From recent researches. By AUSTIN DOBSON,
Author of 'Vignettes in Rhyme.' With 16 Illustrations.

RUBENS. From recent authorities. By C. W. KETT, M.A.,
Hertford College, Oxford. With 16 Engravings.

TURNER. From recent investigations. By COSMO MONKHOUSE,
Author of 'Studies of Sir E. Landseer.' With 20 Engravings.

THE LITTLE MASTERS. From recent authorities. By W.
B. SCOTT, Author of 'Lectures on Fine Arts.' With 16 Engravings.

* * * An *Edition de luxe*, containing 14 extra plates from rare engravings in the
British Museum, and bound in Roxburgh style, may also be had, price 10s. 6d.

HOLBEIN. From the text of Dr. A. WOLTMANN. By JOSEPH
CUNDALL, Author of 'Life and Genius of Rembrandt.' With 20 Engravings.

TINTORETTO. From recent investigations at Venice. By W.
ROSCOE OSLER, Author of occasional Essays on Art. With many Engravings.

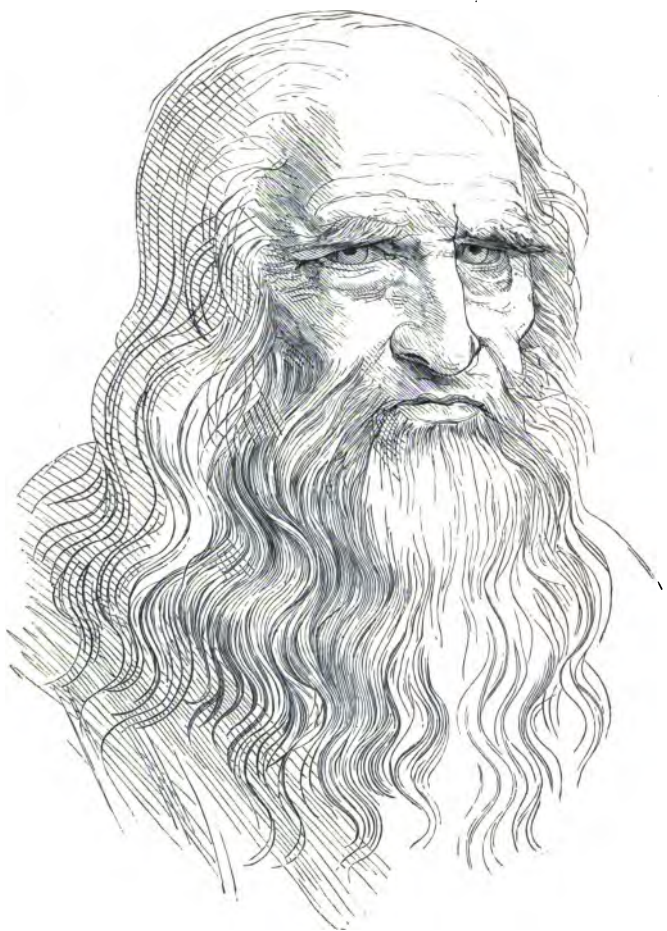
RAPHAEL. From the text of J. D. PASSAVANT. By N. D'ANVERS,
Author of 'Elementary History of Art.' With 20 Engravings.

VAN DYCK AND HALS. From recent authorities. By PERCY
R. HEAD, Lincoln College, Oxford. With 16 Engravings.

TITIAN. From the most recent authorities. By RICHARD FORD
HEATH, M.A. Hertford College, Oxford. With 16 Engravings.

REMBRANDT. From the text of C. VOSMAER. By J. W.
MOLLETT, B.A., Brasenose College, Oxford, Officier de l'Instruction Publique
(France). With 16 Engravings.





LEONARDO DA VINCI.

FROM A DRAWING IN RED CHALK BY HIMSELF. IN THE ROYAL LIBRARY, TURIN.

"The whole world without Art would be one great wilderness."



LEONARDO

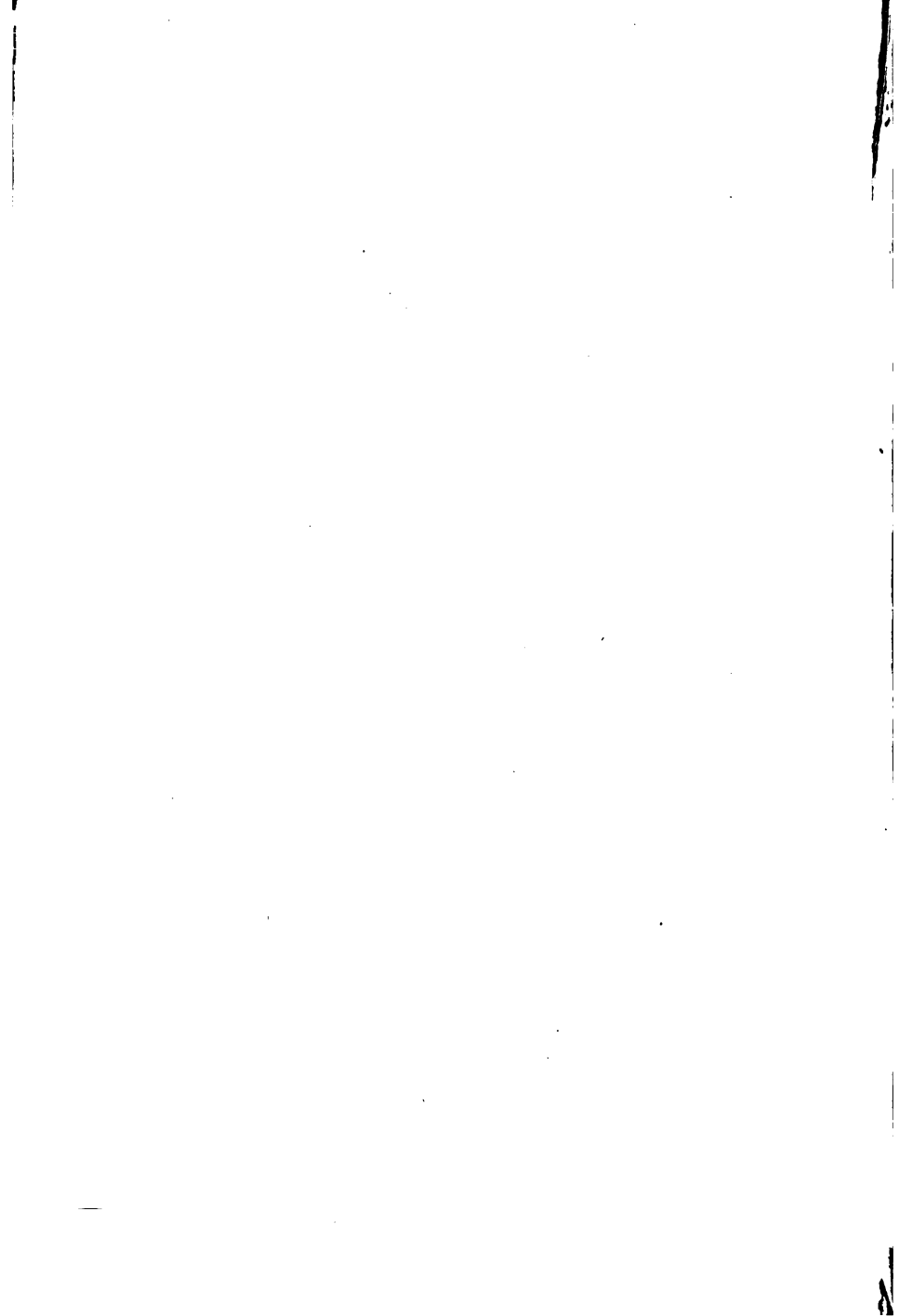
BY JEAN PAUL RICHTER, PH.D.

Author of 'Die Mosaiken von Ravenna.'



NEW YORK:
SCRIBNER AND WELFORD.

LONDON:
SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON.
1881.



W
3V77



PREFACE.

MORE or less successful biographies of Leonardo da Vinci have of late years appeared from the pens of Charles Blanc, Charles Clément, Mrs. Heaton, and Karl Brun. In this work, which Mr. Percy E. Pinkerton has kindly translated for me, I have sought to keep within the limits proper to a mere biography, endeavouring mainly to verify the facts of the artist's life, and to confirm the authenticity of those works which he has left behind. Happily in this instance it has been not wholly impossible to add somewhat to our former personal knowledge of the great painter, as the best and most reliable sources of information are Leonardo's own unpublished documents, which have hitherto met with but scant attention from the student of art. The researches undertaken by me in the four Leonardo MSS. in London, and the numerous memoranda in the Royal Library at Windsor—access to which has been most graciously accorded to me—have led to results which throw new light upon several facts relating to Leonardo's biography, and to the history of his works.

Certainly, a painter's character is to be gauged from a study of his pictures rather than from the actual incidents in his life; yet in discussing Leonardo da Vinci's works, it is primarily with historical questions that we have to do. In this volume I have purposely treated only of such paintings by the master which I can conscientiously pronounce to be his. Of these the list is so short a one, that to some my remarks thereon may savour of hypercriticism. Yet for this the master himself is to blame; we can only echo the universal lament as to the dearth of pictures which he has given to posterity. In Leonardo's own day, even, his contemporary Ugolino Verino wrote thus reproachfully of him:

*" . . . forsan superat Leonardus Vincius omnes,
Tollere de tabula dextram sed nescit, et instar
Protogenis multis vix unam perficit annis."*

It would have been outside my purpose to sift and weigh the reasons no less obvious than unwarrantable whereby so vast a list of spurious pictures has been traditionally ascribed to Leonardo. Possibly also such a task would have been quite barrén of result; for when called upon to refute the assertions of prejudiced egoism, the pen of the art-critic falls powerless. Painting has a language of its own—a language with dialects not understood by all. Leonardo himself has justly said, "Thirst shall parch thy tongue, and thy body shall waste through lack of sleep and sustenance, ere thou canst describe in words that which painting instantly sets forth before the eye."

In the words of a celebrated Italian connoisseur, "There is still very little known about Leonardo da Vinci, not only

on the other side of the Alps, but also among us here. Together with Giorgione, he ranks as that one of the great Italian masters who, thanks to the ignorance and stupid vanity of some, has met with indifference, nay even with disrespect. To show us this figure aright, in its sublime, its colossal outline, is in truth the most beautiful as also the most difficult of tasks which the art-historian can set himself. England, with its variety of countless undiscovered treasures, is of all places the fittest whence to come nearer to the master, to study him closer, and to know him more thoroughly."

J. P. R.

LONDON, *December*, 1879.





FROM A DRAWING IN THE LOUVRE, BY LEONARDO.



CONTENTS.

CHAPTER I.

	PAGE
The Florentine School of Painting in the Fifteenth Century—	
The youth of Leonardo da Vinci—The Studio of his Master,	
Verrocchio	1

CHAPTER II.

Journey to Milan—His Letter to Duke Lodovico—The <i>Last</i>	
<i>Supper</i> —Goethe's Criticism of the Picture—Preparatory Studies	12

CHAPTER III.

The Equestrian Statue of Francesco Sforza—Leonardo as an	
Architect—As a Painter—Portrait Paintings	31

CHAPTER IV.

Leonardo's Scholars in Lombardy: The "Accademia Leonardi	
Vincii"—Milanese Engravings—The Fall of Lodovico Sforza	48

CHAPTER V.

Leonardo at Venice—His Portrait of Isabella Gonzaga—	
Residence in Florence—In the service of Cesare Borgia	57

CHAPTER VI.

In French Service—Visit to Rome—In the Service of Francis I.	PAGE
—The Madonnas in the Louvre and at Charlton Park—	
Residence at Cloux—Leonardo's Death	92

CHAPTER VII.

Leonardo's personal Appearance—His Principles in Art—Caricatures—The 'Trattato della Pittura'—His Manuscripts—	
Achievements in Science—Leonardo's Library—The Philosopher and the Poet.	107





ILLUSTRATIONS.

After Paintings.

	PAGE
Adoration of the Kings at Florence	9
The Last Supper Milan	20
Virgin and St. Anne * (<i>Double Plate</i>) London	72
Battle of Anghiari <i>Lost</i>	80
Mona Lisa Paris	88
Vierge aux Rochers Paris	100
La Sainte Anne Paris	101

After Drawings.

Portrait of himself at Turin	<i>Frontispiece.</i>
Female Head Florence	42
Head of Christ * Venice	46
Head of a Boy * Louvre	112

After Sketches.

Men on Horses fighting with a Dragon at Paris	viii
Group for the Last Supper Paris	30
Suggestion for the Sforza Monument Windsor	35

After Engraving.

Female Head in London	54
---	----

* Drawn by James J. Williamson.





LEONARDO.

CHAPTER I.

THE FLORENTINE SCHOOL OF PAINTING IN THE FIFTEENTH CENTURY—THE YOUTH OF LEONARDO DA VINCI—THE STUDIO OF HIS MASTER VERROCCHIO.

VIEWED historically, there is no School of Painting which suggests a more definite organization than that of Florence during the fifteenth and early portion of the sixteenth century. Her republic, under the guidance of the most famous of the Medici, Cosimo, the "father of the fatherland," and his grandson Lorenzo il Magnifico, was then at its zenith. In northern Italy at that time Mantegna and Giovanni Bellini were the stars before whose lustre every other luminary paled; and no artist having any hope of fame could fail to visit their school, or at any rate to make their works a model for self-instruction and improvement. In Florence it was otherwise. As representatives of her school a whole list of brilliant names may be cited—men of marked individuality, every one of them. Each possessed his own particular method, yet was not content with simply imparting such method to his

pupils; each was also anxious that by new roads a new ideal might be reached. All the more important works of the early Florentine school are alike distinguished by an intense breadth and grandeur of conception and execution. With these masters the faculty of regarding nature from an exalted stand-point appears to have been innate. The trivial, the commonplace had no share in their design; their whole aim was a characteristic portrayal of the beautiful such as they found it in nature.

Andrea del Castagno, Paolo Uccelli and Masaccio form the trio, whence, at the commencement of the century, the movement sprang. Doctrines similar to theirs were taught to the succeeding generation by the two Pollajuolos, Piero della Francesca, Alessio Baldovinetti and Andrea Verrocchio. Fra Filippo Lippi and his son Filippino, Botticelli—Filippino's teacher—and Pesellino of untimely death were among those whose bent lay in a more romantic direction. Domenico Ghirlandajo prepares the way for Fra Bartolommeo and Raphael; to Signorelli succeeds Michelangelo; while in Verrocchio the art of Leonardo da Vinci finds its immediate precursor. The style of all these masters is characterised by a marked decline from the earlier manner of Giotto, the founder of the Florentine school of painting and indeed of all Italian art. Since Vasari, it has been affirmed that these old masters drew their knowledge principally from the antique. It is certainly possible that they may have been influenced by those few old Roman statues to which they had access. At all events, their efforts in the field of art cannot be ascribed to any less powerful a source of inspiration. In discussing this question; however, we must not forget that, of the splendid monuments of Greek

art at its prime, which we can now admire, the Florentine painters knew nothing whatever.

In the following paragraph, Leonardo da Vinci gives us a more correct idea of how slight was the influence of the antique upon Florentine art in the fifteenth century. We shall notice, too, that he assigns to Giotto and Masaccio precisely that amount of importance which is still theirs in the present day.

"A painter will produce works of but poor quality who takes for his guide the paintings of others; but if he will learn from natural objects, he will bring forth good fruit. This we may see exemplified in the later Roman painters, who by continually copying the work of others from age to age hastened the decay of their art. After these came Giotto, the Florentine, who, brought up among the mountains, with goats for his companions, yet found himself urged by nature to be an artist, and began by sketching upon stones the animals which he tended. From this he proceeded to copy all the other animals that he met with in the neighbourhood, and by these means acquired such a degree of skill as to surpass not only the artists of his own time, but all those of many past ages. After him, art again fell off, through continual imitations of pictures, until Tommaso of Florence—known as Masaccio—showed by the perfection of his work how fruitless were the labours of those who followed any other leader than Nature, the mistress of all masters."

Vasari's detailed account of the life and works of Leonardo was written in 1550, just thirty-one years after the painter's death. Although not the oldest, if taken as a whole, it is even now the best literary source whence we can gain a knowledge of the master. A MS. in the

Magliabechian Library at Florence contains a short biography of an earlier date, written by an anonymous author, which throws new light upon the facts of the artist's life.* Perhaps it was also before Vasari's time that Paolo Giovio, of Como, published his interesting biography of Leonardo—Giovio, the greatest Latin historian of the sixteenth century.† A few documents, letters of his own and of contemporaries, with his printed essays, are all that we have to form the disconnected record of his life.

Leonardo da Vinci was born in 1452, at the Castle Vinci, which is situated in the vale of the Arno, midway between Pisa and Florence. He was the natural son of Ser Piero Antonio da Vinci, notary to the Signory of Florence. His mother's name was Caterina, and she afterwards married a certain Accatabrina di Piero del Vacca di Vinci. The son was brought up entirely in his father's house.

Of his youthful education we are unable to judge; we only know it to have been a varied one. Vasari tells us that, "In arithmetic he made such rapid progress that he often confounded the master who was teaching him by the perpetual doubts he started, and by the difficulty of the questions he proposed. He also commenced the study of music and resolved to acquire the art of playing the lute, when, being by nature of an exalted imagination and full of the most graceful vivacity, he sang to that instrument most divinely, improvising, at the same time, both the verses and the music."

Yet of his early pursuits, drawing and modelling

* 'Archivio Storico Italiano.' Serie Terza, tomo xvi. p. 219-230.

† See G. Bossi, 'Del Cenacolo di Leonardo da Vinci.' Milano, 1810.

in clay had the greatest charm for him. It was this which induced his father to place him with his friend, Andrea del Verrocchio, in whose studio the boy's genius would be developed by a thorough artistic training. No more fitting teacher could at that time have been found in Florence. Verrocchio was one of her greatest geniuses: it is only in productiveness that he ranks second to most of his contemporaries. Unlike Perugino and Botticelli, he was not of those who painted for the market: works from his brush are rare; yet they mark an epoch in art. Verrocchio's genius was imitative. His pupils were primarily taught sculpture and modelling in bronze, and likewise painting. Among those who learnt of him were Lorenzo di Credi and Perugino.

Raphael's father, Giovanni Santi, whose skill was greater in painting than in verse, has coupled Perugino's name with that of Leonardo in the following lines:

"Due giovin, par d'etate e par d'onore,
Leonardo da Vinci e'l Perugino,
Pier della Pieve, ch'è un divin pittore."

Of the profound influence exercised by Verrocchio upon his pupils we have evidence in the fact that his drawings and those of Leonardo and Lorenzo di Credi bear such close resemblance in style as to be not easily distinguishable. According to Vasari, it was under Leonardo's supervision that Di Credi produced the graceful figures in his carefully finished pictures; small wonder, then, if these should at times be ascribed to his more illustrious fellow-student. Leonardo was even entrusted with the completion of Verrocchio's own paintings; and, considering the existing relations between master and pupil, this is

less a matter for surprise than a like occurrence would be in the art world of to-day. Verrocchio was commissioned by the monks of Vallombrosa near Florence to paint a picture of the *Baptism of our Lord*. This is yet to be seen at the Academy of Fine Arts in Florence. Christ stands in the river looking downwards, with hands crossed in prayer, to the right kneel two angels by a palm-tree, holding the Saviour's robe, while, on the left, John the Baptist is seen in the act of baptizing. A far-stretching landscape forms the background. Vasari, in speaking of this work, tells us that, Leonardo "painted an angel holding some vestments, and completed that figure in such a manner that the angel of Leonardo was much better than the portion executed by his master, which caused the latter never to touch colours more, so much was he displeased to find that a mere child could do more than himself." The kneeling angel in the foreground is certainly the most pleasing figure in the picture, and thus it comes that Vasari's anecdote has always been believed. On the other hand, it is very improbable, and doubtless an exaggeration, that it was the maestro himself who proclaimed his pupil victor in the contest. At any rate, upon closer examination, our verdict will be a different one. The plan, the design, are clearly Verrocchio's. The same medium which gave such luminous transparency to all the works of the early Florentine masters is here used in the painting of the bold and realistic figure of St. John. The anatomy of vein and muscle in the gaunt hands of the hermit is given with absolute accuracy. Donatello and other artists of the time were all wont to represent John the Baptist as the most haggard of men, and thus Verrocchio, who is responsible for the figure in question, can scarcely be blamed for

following their example. What share, then, had Leonardo in the picture? Not merely the angel ascribed to him by tradition, but also the figures of Christ and of the second angel, as well as the landscape background are obviously painted entirely in oil, a method which Leonardo always employed, whereas Verrocchio never abandoned his tempera groundwork. The same hand which drew the charming profile of the angel is discernible in the flowing locks, in the arms, hands and torso of the figure of Christ, which are no less perfect in their way. Respecting Da Vinci's years of study spent in Verrocchio's atelier, we know that, when there, Lorenzo di Credi became so imbued with Leonardo's style, that his pictures of that period have been confounded with those of the latter. In all likelihood it was he who painted the beautiful *Madonna*, in the National Gallery (No. 297), first attributed to Ghirlandajo and at present to Pollajuolo, a picture rich with reminiscences of Verrocchio's *Baptism*. At all events it was in his studio that the *Madonna* was produced.

Leonardo probably came under Verrocchio's tutorship in the year 1470. In the June of 1472 we find an entry of his name in the account-books of the guild of painters as an independent artist. He is mentioned as "Lyonardo di Ser Piero da Vinci."* Of all his early works not one remains, although both Vasari and the anonymous biographer mention a cartoon by him in water-colours, representing the Fall, in which animals and trees are painted with wonderful truth. It was intended to have a piece of tapestry woven in Flanders after this design for the King of Portugal; but this was never done. When Vasari wrote,

* Uzielli, 'Ricerche intorno a L. da Vinci.' Firenze, 1872.

the cartoon was in Florence ; since that time it has entirely disappeared. The same writer gives a minute description of a shield which Leonardo painted at his father's request. His aim was to impart to the panel a power equal to that possessed by the actual head of Medusa, and therefore he depicted "a hideous and appalling monster, breathing poison and flames, and surrounded by an atmosphere of fire. This he caused to issue from a rift in a dark rock, with poison reeking from the cavernous throat, flames darting from the eyes, and vapours rising from the nostrils—in such sort that the result was indeed a most fearful and monstrous creature." This was afterwards sold to the Duke of Milan for 300 ducats, and since then nothing is known of it. The same fate befel an unfinished picture of the *Medusa*, and its loss is hardly compensated for by a similar painting of later date, erroneously ascribed to Leonardo, which is now in the Uffizi at Florence.

On another occasion, Vasari himself would appear to have been deceived. He mentions "a picture of Our Lady which was greatly prized by Pope Clement the Seventh : among the accessories of this work was a bottle filled with water in which some flowers were placed with dew-drops on the leaves, so true to nature that they appeared to be real." Now it is beyond question that the work at present in the Borghese Gallery at Rome, and which narrowly answers to this description, was in reality painted by Lorenzo di Credi, although ascribed to Da Vinci. Vasari also speaks of a drawing, made for Antonio Segni, of Neptune "in his chariot drawn by sea-horses, in which the turbulent waves, the various phantoms surrounding the chariot, the monsters of the deep, the winds and the heads of the marine deities" are what provoke his





THE ADORATION OF THE MAGI.

SKETCH FOR THE PAINTING IN THE GALLERY OF THE UFFIZI, FLORENCE.

special wonder. We have likewise to deplore the loss of this work. Yet among the rare collection of the artist's drawings at Windsor there is a similar composition, done in black chalk, probably a rough outline of his design. His anonymous biographer informs us: "And he began to paint a picture for the Palazzo Publico which, later on, was completed from his drawing by Filippo di Fra Filippo." The contract of January 1, 1478, is still extant, in which Leonardo agreed to paint an altar-piece for the chapel of St. Bernard in the above-named palace. The young artist set to work at once and as early as March had received an instalment of his fee. That was all, however, for after a while the commission was transferred to Filippino Lippi, whose composition is indeed a totally independent one, bearing no trace of Leonardo's manner.

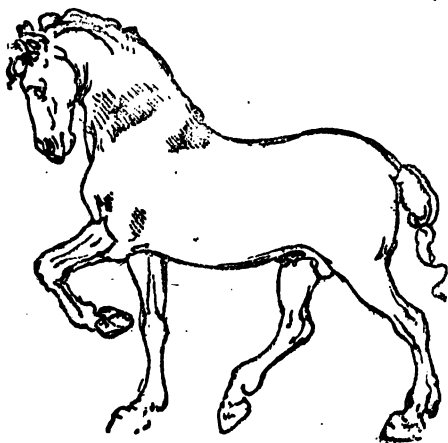
We can, however, close this melancholy list of lost treasures, the first-fruits of the painter's genius, with a picture, which, although unfinished, bears ample proof of the master's hand, and the genuineness of which is also attested by documents. It is the large canvas of the *Adoration of the Kings* in the Uffizi at Florence. Although in an incomplete state, our enjoyment of it is in no way marred. On the contrary, the more closely we study it, the more we become convinced that, if completed in oils, this composition, from the very magnificence of its design, would lose not a little of its charm. It is painted in brown, and represents the Madonna seated in the foreground holding the Infant Christ in her arms. The kings with their attendants are grouped around, forming a semicircle of venerable old men and enthusiastic youths. The ordinary effects to be gained in the colouring of rich robes are not sought here, lest they should interfere with the beholder's

just appreciation of the subtle shades of expression to be found in the faces and gestures of each. We do not mean to say that Leonardo left this incompleted because he was uncertain as to the carrying out of his scheme, which, in the case of Michelangelo, was the common reason why so many of his works remained unfinished:—on the contrary, the work does not bear in any one part the traces of indecision—not even in the details of background, composed of horsemen, trees and fantastic ruins. The several forms are drawn with a sure hand and are all characterised by great individuality. In this respect, the picture may be considered as complete as similar works by Rembrandt in monochrome—as, for instance, the sketch of *John the Baptist Preaching*, in Lord Dudley's collection.

In the March of 1480 the monks of San Donato at Scopeto had given an order to Leonardo for this picture to adorn the chief altar of their church, and in the July of the year following a formal agreement was entered into. The price offered was three hundred florins in gold, on condition that the work was ready within twenty-four, or at the most, thirty months. As the artist failed to fulfil these conditions, the arrangement with him was cancelled, and Filippino Lippi was instructed to do the work. Lippi's unfinished picture, the *Adoration of the Kings*, is yet to be seen in the Uffizi at Florence, where it hangs close to Leonardo's representation of the same subject. It must have been about this time that the small painting by Leonardo was produced, now in the Vatican Pinacoteca at Rome. It is in a brown monochrome, and represents a kneeling St. Jerome, whose figure is greatly foreshortened. In the Windsor collection we have found preparatory drawings for this picture.

Nor does Vasari omit to tell us of the young painter's energy and skill as a sculptor. Verrocchio, his teacher, was, as we know, far more proficient with the chisel than with the brush. According to Vasari, Da Vinci, while yet quite a youth, executed several heads in terra-cotta of smiling women and children, which were afterwards reproduced in gypsum. But none of these remain; and of the numerous figures in marble, bronze and terra-cotta which Verrocchio's studio has furnished, admirable as most of them are, there is not one that can with certainty be ascribed to Leonardo.

Vasari's testimony as to the young painter's skill as an architect is corroborated by the wonderful specimens of original architecture to be seen in the picture of the Epiphany already described.





CHAPTER II.

JOURNEY TO MILAN—HIS LETTER TO DUKE LODOVICO—THE 'LAST SUPPER'—GOETHE'S CRITICISM OF THE PICTURE—PREPARATORY STUDIES.

LEONARDO DA VINCI has often been blamed for choosing to forsake the home of his youth, and for making Milan the scene of his energies, with the Duke Lodovico Sforza as his patron. There was certainly no lack of offers of employment; nor could he complain of any neglect. In the following lines, taken from the anonymous biography, we shall perhaps find the solution of this. "Lorenzo de' Medici il Magnifico adopted the young painter, giving him a salary and commissions for pictures, with the garden of the Medici (near the Piazza di San Marco at Florence) as his studio." This garden formerly contained ateliers for artists, marbles, and also a small collection of antiques. We know that Michelangelo worked here some years later. The biography further tells us that "Leonardo was thirty years old when he was sent by Lorenzo il Magnifico with Atalanto Migliorotti to take a lute to the Duke of Milan."

According to Vasari, Leonardo is reported to have gone there "on his own account," with "a lute which he had

himself constructed almost wholly of silver and in the shape of a horse's head, a new and fanciful form calculated to give more force and sweetness to the sound. When playing this instrument, Leonardo surpassed all the musicians who had assembled to perform before the Duke; he was besides one of the best improvisatori in verse existing at the time; and soon the Duke became enchanted with the admirable conversation of the young Florentine artist."

In fixing the date of this occurrence the anonymous biographer is undoubtedly more correct than Vasari, who names Lodovico Sforza as the Duke, but Sforza did not succeed to the dukedom until the year 1494, when the artist had reached the age of forty-two. Belinzoni, at all events, tells us that Leonardo conducted the festivities which took place at Milan on the occasion of the marriage of the Duke Gian Galeazzo with Isabella of Calabria. The anonymous biographer who gives the year 1482 as the date when this occurred is therefore more entitled to our belief. And he has named Atalanto Migliorotti who used to learn lute-playing under Leonardo's tuition as his companion.

In the year 1447, the Sforza family had come into power at Milan. As guardian of his nephew Gian Galeazzo, Lodovico Sforza, called *il Moro*, third son of Francesco Sforza, had likewise succeeded in obtaining the regency. This was in 1480.

In order to maintain his hold upon the reins of government, Sforza sought to appear before his subjects in the double rôle of a cruel, vindictive tyrant and of a brilliant philanthropist, who drew around him the leading representatives of science and art of the day. We

have still a manuscript by Leonardo in which he offers his services to Lodovico. This remarkable document is as follows :—

“ Having, most illustrious lord, seen and duly considered the experiments of all those who repute themselves masters in the art of inventing instruments of war, and having found that their instruments differ in no way from such as are in common use, I will endeavour, without wishing to injure any one else, to make known to your Excellency certain secrets of my own; as briefly enumerated here below :—

“ 1. I have a way of constructing very light bridges, most easy to carry, by which the enemy may be pursued and put to flight. Others also of a stronger kind, that resist fire or assault, and are easy to place and to remove. I know ways also for burning and destroying those of the enemy.

“ 2. In case of investing a place I know how to remove the water from ditches, and to make various scaling ladders, and other such instruments.

“ 3. Item : If, on account of the height or strength of position, the place cannot be bombarded, I have a way for ruining every fortress which is not on stone foundations.

“ 4. I can also make a kind of cannon, easy and convenient to transport, that will discharge inflammable matters, causing great injury to the enemy and also great terror from the smoke.

“ 5. Item : By means of narrow and winding underground passages made without noise, I can contrive a way for passing under ditches or any stream.

“ 6. Item : I can construct covered carts, secure and

indestructible, bearing artillery, which, entering among the enemy, will break the strongest body of men, and which the infantry can follow without any impediment.

"7. I can construct cannon, mortars and fire engines of beautiful and useful shape, and different from those in common use.

"8. Where the use of cannon is impracticable, I can replace them by catapults, mangonels, and engines for discharging missiles of admirable efficacy, and hitherto unknown—in short, according as the case may be, I can contrive endless means of offence.

"9. And, if the fight should be at sea, I have numerous engines of the utmost activity both for attack and defence; vessels that will resist the heaviest fire—also powders or vapours.

"10. In time of peace, I believe I can equal any one in architecture, and in constructing buildings, public or private, and in conducting water from one place to another.

"Then I can execute sculpture, whether in marble, bronze or terra-cotta, also in painting I can do as much as any other, be he who he may.

"Further, I could engage to execute the bronze horse in lasting memory of your father, and of the illustrious house of Sforza, and, if any of the above-mentioned things should appear impossible and impracticable to you, I offer to make trial of them in your park, or in any other place that may please your Excellency, to whom I commend myself in utmost humility."

As Mrs. Heaton rightly observes, this could only have been written by a genius or by a fool. The handwriting is from right to left, as in Hebrew or Arabic,

and it is far from easy to decipher. Leonardo used to write all his private memoranda in this way; we can therefore conclude that this document was nothing more than a rough copy of the letter which he actually sent to Lodovico Sforza. To some it has seemed strange that, among the list of his accomplishments he does not include lute-playing, for, as Vasari tells us, it was his fascinating performances on the lute which first brought him under the notice of the Duke. The anonymous biographer, however, relates that Leonardo was introduced as a lute-player to Lodovico by Lorenzo il Magnifico, so that perhaps it was only natural that he should omit any mention of a talent which had already been recognised.

Leonardo da Vinci now took up his residence in Milan, where he remained for nearly twenty years; but during that period we have comparatively little information as to his artistic achievements. A statue and some few paintings are, as his biographers tell us, all that he produced during the whole of that time, whereas Raphael, in a like period, was able to execute an infinite series of masterpieces. Indeed, Leonardo's entire artistic career is within the limits of those twenty years.

From political reasons it was necessary for Lodovico il Moro to secure the favour of the Emperor Maximilian, and it was probably on this account that Leonardo was commissioned by the Duke to paint an altar-piece representing the birth of Christ, which was sent to the German emperor as a present. Respecting this picture, the anonymous biographer tells us that, in the opinion of connoisseurs, it was looked upon as a marvellous and unique work of art, now, alas! entirely lost to us.

The Duke seems to have understood how to profit by the various talents of his artist. He was entrusted not only with different matters connected with engineering, but also at the many court festivities he was made master of the ceremonies and manager in general; but however much the people of his epoch may have admired the brilliancy of his genius in this capacity, it is a circumstance which we of this day can only deplore. From the accounts of these gay proceedings the student of art history can glean nothing. Although, of course, only in outline, the designs which Leonardo made on these occasions would undoubtedly be of the greatest interest: work of that kind by great masters has always had a special worth; and we may safely assume that Leonardo's contributions to these decorations would have been stamped with such taste and such refinement as to serve as a model for all time.

It is without doubt a sad task for the biographer of the great Florentine, in recording the story of his manifold activity, to be unable to point to any tangible result. For at this day, if Leonardo's fame as a great artist be in popular opinion not less than that of Raphael it can only rest upon his one supreme creation—only a wreck, now, it is true—yet which bears abundant proof of the extraordinary qualities of his genius. His large fresco of the *Last Supper* in the refectory of the convent of the Madonna delle Grazie in Milan has for long past been in a greatly damaged condition, yet—like the Elgin marbles, in which, despite their mutilation, one may recognise the highest ideal that sculpture has ever reached—Leonardo's picture remains the most perfect composition in the history of painting of all ages. Copied and reproduced times

without number, it is everywhere known and everywhere admired. Old plates of it in the Florentine and Paduan style appeared long before Morghen produced his celebrated engraving. Most of the old copies on canvas, which are often to be met with in public galleries and private collections, are attributed to Marco d' Oggionno, one of Leonardo's pupils. At the beginning of the century, Bossi catalogued some fifty copies, and countless others are now circulated annually in every part of the world. We may even see it as a fresco in a Byzantine convent of the Athos, in Macedonia. Voluminous commentaries have been written upon it, which in their turn have needed commentaries equally lengthy.

The original painting occupies the entire breadth of the narrow wall of a now-unused dining-hall in the convent. Of its origin we know but little. A bill sent in by the architect of the monastery in 1497, "for work in the refectory where Leonardo has painted the Apostles," has hitherto led one to suppose that at that time the fresco was completed. Yet this theory is confuted by a recently discovered letter of the Duke's, from which it can be clearly seen that in that year Leonardo's picture was far from being finished. The Duke, writing to his secretary Domino Marchesino Stange, says :

"We have entrusted to you the carrying out of the matters mentioned on the enclosed list; and although our orders were delivered to you by word of mouth, it shall be to our comfort that we set them down in these few words, to inform you how extraordinary is our interest in their execution.

"LUDOVICO MARIA SFORTIA.

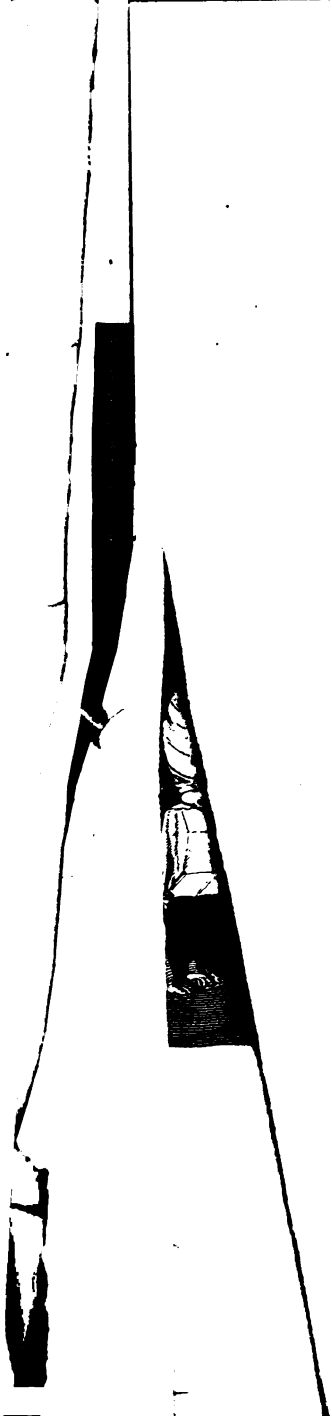
"Milan, the 30th of June, 1497."

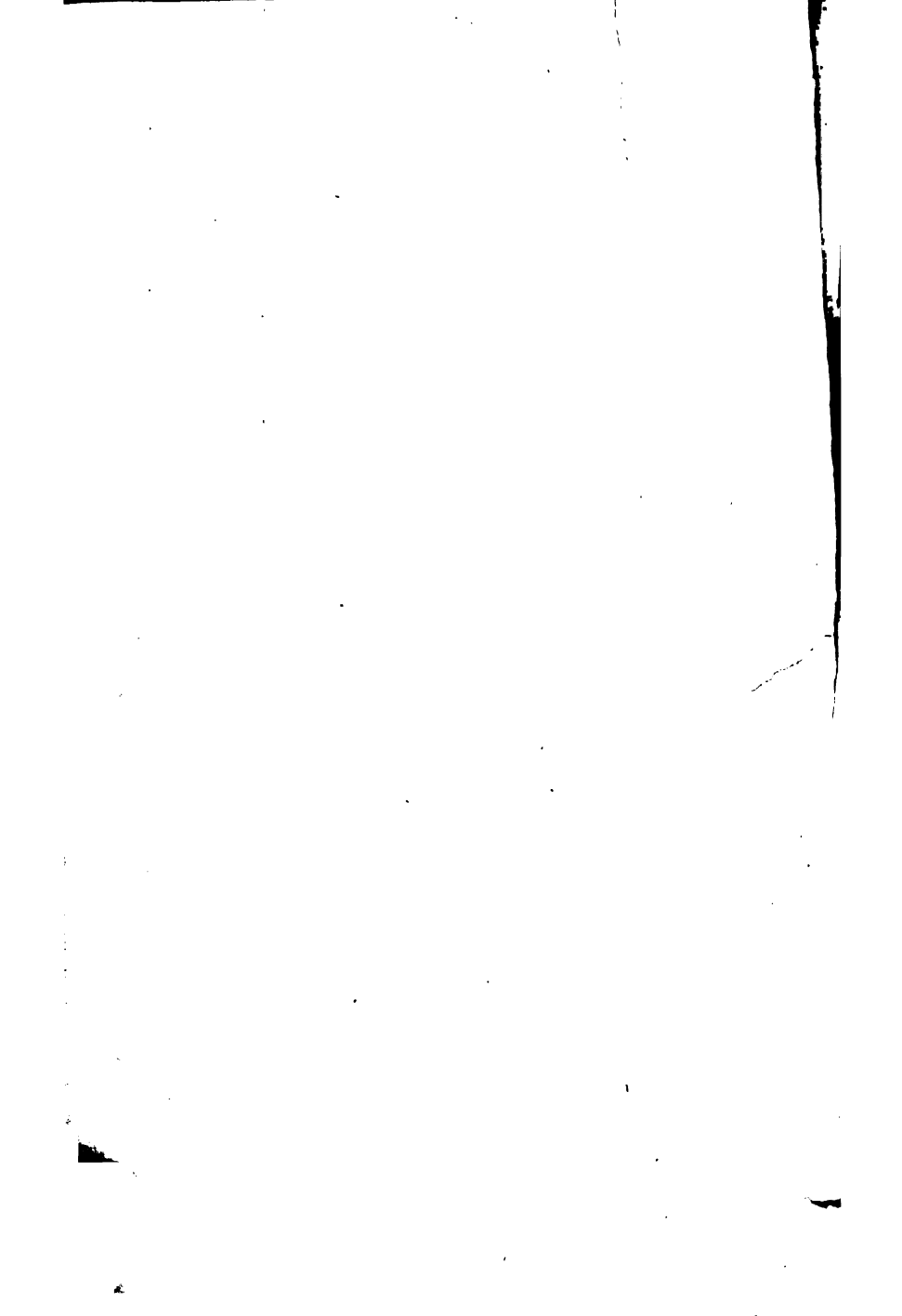
"memoriale" appended to this letter shows that the Duke really took a personal interest in art. Of the many different matters here mentioned, the greater part refers to works of art. "Item: Of Leonardo of Florence it is to be solicited that he finish the work in the Refettorio delle Gratie, when he must set to work upon the other front wall thereof, which, if he can do, the agreements previously signed by him respecting its completion within a given time will be cancelled."

This interesting document proves that it was not only the monks, but also the Duke who gave him the commission to paint the *Last Supper*. One is almost inclined to believe that there was some sort of difference between Ludovico and the artist, since their correspondence was conducted in this indirect manner. By the work upon the "front wall" of the refectory is probably meant the portraits to which we shall have occasion to refer later on. Luca Paciolo informs us definitely that in 1498 Leonardo had put the finishing touch to his picture. He may have been ten years engaged upon it; perhaps even longer than this. Bandello, in one of his novels, relates how, "in Lodovico's time, some gentlemen living in Milan were met one day in the monks' refectory of the convent delle Grazie, where with hushed voices they watched Leonardo da Vinci as he was finishing his marvellous picture of the *Last Supper*. The painter was well pleased that each should tell him what they thought of his work. He would often come to the convent at early dawn; and this I have seen him do myself. Hastily mounting the scaffolding, he worked diligently until the shades of evening compelled him to cease, never thinking to take food at all, so absorbed was he in his work. At other times

he would remain there three or four days without leaving his picture, only coming for a few hours to remain before it, with folded arms, gazing at his figures as he criticise them himself. At mid-day, too, when the heat of a sun at its zenith has made barren all the streets of Milan, I have seen him hasten from the citadel, where he was modelling his colossal horse, without seeking the shade, by the shortest way to the convent, where he would add a touch or two and immediately return." These accounts certainly give one the impression of being trustworthy,—more to be credited at any rate than the anecdotes about the prior of the convent who complained to the Duke of the artist's dilatoriness, and many like tales.

During the fifteenth century in Florence the Sacrament of our Lord formed a very common subject for representation on the walls of convent refectories. In 1480, shortly before Leonardo left Florence, Domenico Ghirlandajo's picture there of the *Last Supper* was completed in the Refettorie of the convent Ognisanti. Very possibly Leonardo knew also of Andrea del Castagno's treatment of the same subject in the refectory of St. Appollonia. Both frescoes in their general arrangement resemble Leonardo's picture. The breadth of the wall-painting is occupied by a long table, behind which the disciples are seated, with Christ in the centre, who has apparently just uttered the words, "One of you shall betray Me:" and in the faces of the disciples is to be read the various effect which His words produce. In its main features Leonardo's presentment of the subject is the same as that of the earlier masters of the Florentine Renaissance. But with the Giotto school, as also with Fra Angelico, the conception was a different one. Andrea del Castagno





Then the first to find a new method of treatment, one in the keeping with the Renaissance spirit. In his picture, the thirteens only of St. John and of Judas Iscariot recall the portrangement of medieval compositions. Judas sits apart at the near side of the table opposite to the Saviour, while John is leaning forward in slumber, his head resting upon his arms. In Ghirlandajo's picture we shall find this as well. The artists were obviously perplexed as to how they should depict the Apostle actually resting upon Christ's bosom. In Giotto's *Last Supper*, in Padua, the heads of the disciples, turned away from the spectator and surrounded by enormous nimbi, have an almost ludicrous effect. Andrea del Castagno, Ghirlandajo and Da Vinci left out the nimbi altogether; but Leonardo was the first to represent them all seated on the far side of the table. Yet not only in general outline, but also in his conception of the figures, Andrea del Castagno must be regarded as the forerunner of Leonardo. In Andrea's fresco the pose of every Apostle is as natural as it is varied; there is individuality in each face, and great power of draughtsmanship. The picture makes a profound impression upon us: Botticelli and Filippo Lippi could certainly never have conceived so lofty an ideal. A comparison between the *Last Supper* in the convent of St. Apollonia, in Florence, with that in the refectory of St. Maria delle Grazie, clearly proves that in Andrea del Castagno, Da Vinci had a great predecessor who stood in about the same relative position to him as did Masaccio to Raphael.

In order to thoroughly understand Leonardo's composition as a whole, it is absolutely necessary to study its individual parts. The master has embodied his thoughts as plainly and as clearly as can well be, yet their full

meaning is not to be gathered from a casual examination. Nor is this more than can be expected from a man of such high genius, and when we consider how long was the time spent in working out his conception. Of all those who have described the fresco, Goethe has perhaps been most thoroughly able to give verbal expression to the artist's intention. He wrote an essay upon this picture, from which we quote the following important paragraphs :*

"The means of excitement which he employed to agitate the holy and tranquil company at table are the words of the Master, 'There is one amongst you that betrays Me.' The words are uttered, and the whole company is thrown into consternation; but *He* inclines His head with bent-down looks, while the whole attitude, the motion of the arms, the hands and everything, seem to repeat the inauspicious expressions, which the silence itself confirms. 'Verily, verily, there is one amongst you that betrays Me.'"

"Leonardo enlivened his picture chiefly by the motion of the hands, an obvious resource to an Italian. . . .

"The figures on both sides of our Lord may be considered in groups of three, and thus they appear as if formed into unities corresponding in a certain relation with each other. Next to Christ, on the right hand, are John, Judas and Peter.

"Peter, the farthest, on hearing the words of our Lord, rises suddenly, in conformity with his vehement character. Judas, with terrified countenance, leans across the table, tightly clutching the purse with the right hand, while with the left he makes an involuntary convulsive motion, as if to say, "What may this mean? what is to happen?" In the meanwhile, Peter with his left hand has seized

* Adapted from Noehden's translation, 1821.

John by the right shoulder, who bends towards him, and pointing to Christ, apparently signifies that he should ask who is the traitor. With the handle of a knife which he holds in his right hand, he accidentally touches the side of Judas. The pose of the latter, who, stooping forward alarmed, upsets a salt-cellar, is thus successfully managed. This group may be regarded as the leading one in the picture: it is certainly the most perfect.

“While on the right hand with a certain degree of emotion immediate revenge seems to be threatened, horror and detestation of the treachery manifest themselves on the left. James the elder draws back in terror, and with arms outspread, he gazes transfixed, his head bowed, like one who imagines that he already sees with his eyes those fearful things which he hears with his ears. Behind his shoulder, Thomas approaches our Lord and raises the forefinger of his right hand to his forehead. Philip, the third of this group, completes it in a most pleasing manner. Rising, he bends forward towards the Master, and with his hands upon his breast, he is clearly saying; ‘It is not I, Lord, Thou knowest it! Thou knowest my pure heart, it is not I!’

“And now the three last figures on this side afford us new matter for contemplation. They are conversing together about the terrible news. Matthew turns eagerly to his two companions on the left, hastily stretching out his hands towards the Master. By an admirable contrivance of the artist, he is thus made to connect the foregoing group with his own. Thaddæus shows the utmost surprise, doubt and suspicion; his left hand rests upon the table, while he lifts the right as though he were about to strike the two together, a common action in everyday life,

as when at some unlooked-for occurrence a man should say, 'Did I not tell you so? Did I not always suspect it?' Simon, the oldest of all, sits with great dignity at the bottom of the table; we thus get a full view of his figure, which is clad in a long flowing garb. His countenance and movement show him to be troubled in mind and full of thought; he does not, however, display any marked agitation.

"If we turn our eyes at once to the opposite end of the table, we shall see Bartholomew, who rests on his right foot, crossing the left over it, and bending his body forward, which he supports with both his hands leaning upon the table. He listens as if to hear what John will ask of the Lord; indeed, that disciple's anxiety is shared in by the whole group. James the younger, standing behind Bartholomew, rests his left hand on Peter's shoulder, in the same way as the latter leans upon that of St. John. On James's face we see only a placid request for explanation: Peter again seems to threaten revenge."

"And as Peter behind Judas, so James the younger stretches out his hand behind Andrew, who, being one of the most prominent figures, expresses by half-lifted arms and outspread hands, the fixed horror with which he is seized. This expression occurs only once in the picture, although, alas! it is too often repeated in works composed with less genius and less reflection."

From this description it is evident that Goethe's endeavour has been to do the utmost justice to the painter's conception. But this, alas! in its entirety, is no longer ours; we do not find it in the original, nor in the earliest copies, nor yet in Raphael Morghen's excellent engraving. Even in the picture itself, as it now exists, the expression

in several of the faces of the apostles is exaggerated and unnatural—no longer worthy of Leonardo's brush. Ignoring the old method of fresco-painting, Leonardo mixed his colours with oil—a fatal innovation as it proved. Donato Montorfono's fresco of the *Crucifixion*, painted in 1495, which faces the *Last Supper* in the same refectory, is to this day in an excellent state of preservation, while Leonardo's production in its shattered condition is a melancholy proof of the falsity of his theory. Already his pupil Lomazzo in his 'Trattato della Pittura,' says of it, "La pittura è rovinata tutta." In the course of a few centuries it has been re-painted no less than three times; by Bellotti in 1726, by Mazza in 1770, and finally in this century, perhaps more than once. In 1804, Amoretti, the compiler of 'Memorie Storiche di Leonardo da Vinci,' tells us that in standing before the original he could hardly recognise it, and that its general features were only distinguishable when seen from a distance. On the other hand, if we look at it to-day, both outline and colouring appear most distinctly marked; this is, of course, owing to the present thorough method of restoration; and if the details of the picture provoke our admiration, it is solely due to the specious talent of modern restorers. In their delineation of the heads they have probably gone to Marco d'Oggionno's copy in Milan for a model. Under these circumstances it would be unfair to Leonardo da Vinci to make him responsible for such travestied features of most of the heads.

Nor was it solely the latter-day restorers, by-the-way, who have done harm to the original. With incomprehensible indifference the Dominican monks allowed the lower portion of the central group to be destroyed, in

order to make a door in the wall. Later on, the refectory was converted into a stable by Napoleon's dragoons, who amused themselves by pelting the heads of the apostles with brickbats.

In the year 1800, Raphael Morghen's celebrated engraving appeared, which is reputed to be the most faithful reproduction possible, and in every way the best substitute for the original. Yet even this was not executed from the picture itself. During the three years which he spent in the execution of his engraving he was resident at Florence. His model was a drawing by Teodoro Matteini, made at the request of Morghen's employer, the Grand Duke of Tuscany, who sent Matteini to Milan for that purpose. If we may believe Amoretti, there is no doubt that Matteini, finding the original as it stood would not entirely serve his purpose, was obliged to make use of the picture by d'Oggionno. Morghen's engraving is thus simply a copy of that artist's production, who at the present time is credited with all the more important copies of the original. Besides the one at Milan there is another at Ponte Capriasco in Switzerland; a third in the Louvre, and a fourth in the Diploma Gallery of the Royal Academy. The last is the most celebrated of them, yet in the drawing of the heads the pupil has certainly not kept closely to his master's model. As regards technical treatment, too, it differs much from other authentic works by d'Oggionno. The author of this valuable picture is far more likely to have been Gian Pietrini, a very clever pupil of Leonardo's. De Pagave informs us that Bernadino Luini executed a copy for Louis the Twelfth of France, which was placed in the church of St. Germain l'Auxerrois in Paris. But of this nothing further is known. Rubens also made a copy of the picture,

which the splendid engraving executed from it has helped to make familiar. Like all the copied work of the great Flemish artist from Italian models, it was a translation in his own peculiar style rather than a faithful reproduction. Yet in looking at the figure of Christ it cannot be denied that Rubens has striven to become imbued with the spirit of the great Florentine.

We in the present day can scarcely form an adequate conception of the actual impression which the original picture created. For the contrast is all too marked between the ruined original and well-preserved authentic works by Leonardo, as for instance, the panel pictures in the Louvre.

Two years had hardly elapsed since the completion of the *Last Supper*, when a brilliant assemblage of princes and *condottieri*, fresh from the carnage of battlefields, came to pay Leonardo the tribute of their admiration. The Italian historian, Paolo Giovio, has briefly described this episode in Louis the Twelfth's victorious campaign against Lodovico Sforza, in 1499. In his suite were the Dukes of Ferrara and Mantua, the Princes of Montferrat and Savoy, Cæsar Borgia and the Ambassadors of Genoa and Venice. "The King on beholding the picture was greatly struck thereat, and closely contemplating it, he asked those about him if it were not possible to hew out the wall whereon it was painted, being minded to take the picture with him to France." Strange, indeed, must the impression have been which Leonardo's picture must have made upon the great French king. His wish, however, was fortunately never realized. It is only of late that a process has been discovered for the safe removal and transport of large mural paintings.

Of the studies made by Leonardo for this picture,

unfortunately very few authentic ones remain. The full-size drawings of the heads of several of the apostles in the collection of the Grand Duchess of Weimar have undeservedly the reputation of being genuine, as they are assumed to be identical with those mentioned by Lomazzo. Yet they are done in black crayon, whereas Lomazzo tells us that the heads were in red chalk. A portion of these missing drawings can be identified in the Windsor collection. Among them are finished studies for the heads of Matthew, Simon and Judas, who are all shewn with beardless faces. In the Brera Gallery at Milan, there is a genuine half life-size study in pencil for a head of Christ, which is in a deplorable state of preservation. We seem to learn something of the way in which the picture was first originated by a pen-and-ink sketch in the Louvre of several nude figures in various attitudes. It contains also a group of five seated at a small table; a youth converses with two older men, while another youth listens, resting his head on his elbow—a thorough conception of a St. John, even though the sketch only reminds one of some episode in ordinary life, the hasty reproduction, it may be, of some tavern scene. Perhaps Leonardo was meditating upon the figure of Christ when drawing the man in the lower corner of the paper, who, with his right hand upon his breast, points with the left to a dish. The sketches on the upper portion of the sheet (not given in our illustration) have no connection with any of his known works; the inscription, which is clearly legible in a mirror, refers to an apparatus for ventilation, to which a sponge is affixed.

— On two of the pages in one of Leonardo's note-books, bequeathed in 1876 by Mr. John Forster to the South Kensington Museum, we find a memorandum which shews us the manner in which he first thought out his conception of

the different types of the Apostles. It is without doubt the most important document which we possess relating to the greatest efforts of the master's brush :*

Uno che (voleva bere) beveva
allasciolo stare nel suo sito, e
volselatesta inverso il propo-
nitore,

Un altro rese le dita delle sue
mani insieme echo rigide ciglia
si volta al co'pagno.

Laltro cholle mani aperte mostra
le palme di quelle, e alzalesspalli
inv'le orecchi effa labocha della
maraviglia.

Un altro parla nellorechio allaltro,
ecquello che lascolta si torce
env'so lui e gli porgie liorechi, e
tenendo un choltello neluna-
mano e nellaltra il pane mezo
diviso da tal coltello.

Laltro nel voltarsi tenendo un
choltello in man, v'sa con tal
mano vna zaina sopra della
tavola.

Laltro posa le mani sopra della
tavola, e guarda laltro soffiar
nel bochone.

Laltro si china per vedere il pro-
ponitore, effarsi obra colla mano
alliochi.

Laltro si tira inderieto acquel
chesichina che vede il proponi-
tore infral muro el cielo.

One (of the apostles) is about to
drink, but leaves it (the glass)
in its place, and turns his head
towards the prolocutor.

Another extends out the fingers
of his hands, and with a severe
expression on his brow turns
towards his neighbour.

Another opens his hands, showing
the palms, and shrugs the
shoulders towards the ears,
whilst with his mouth he ex-
presses his astonishment.

Another whispers in the ear of
one who hearkens, bending
towards him and holding his
ear close to him, whilst in one
hand he holds a knife and in
the other the bread, which is
half cut by the said knife.

Another, holding a knife in his
hand, overturns with this hand
the glass which stands on the
table.

Another rests his hands on the
table and regards his neighbour,
who blows upon his food.

Another bends forward towards
the prolocutor, and shades his
eyes with one hand.

Another withdraws behind the
one who stoops forward and
looks at the prolocutor, between
the wall and the sky.

* See Appendix, Note 1.

On comparing these notes with the picture itself, we shall easily see that they differ but little from the ideas which the master has embodied in his fresco; indeed they possess all the characteristic features of that wonderful composition. It is worthy of remark that here neither the apostles nor Christ are mentioned by name, the latter being repeatedly styled "proponitore," evidently with reference to the utterance: "Verily, one of you shall betray Me."

There are two other studies for the *Last Supper* in the Windsor collection, lightly drawn in pen-and-ink, in which the figure of Christ corresponds to that in the Louvre sketch. The arrangement is the same as in the earlier Florentine pictures; St. John, leaning upon the Saviour's breast, rests his head upon the table, while Judas is seated on the opposite side of it.



FROM THE PEN-AND-INK SKETCH IN THE LOUVRE.



CHAPTER III.

THE EQUESTRIAN STATUE OF FRANCESCO SFORZA—LEONARDO AS
AN ARCHITECT—AS A PAINTER—PORTRAIT PAINTINGS.

IN the letter which Leonardo sent to Lodovico il Moro, stating his capabilities, he mentions among other things that he is willing to "undertake the execution of the bronze horse in lasting 'memory of his father Francesco, and of the illustrious house of Sforza.'" We have various reasons for inferring that the model was begun without loss of time. According to Bandello, the artist worked alternately at the *Last Supper* and this equestrian statue; but, as regards the latter, it is certain that he could not have given it his uninterrupted attention. Of this we have proof in his own manuscripts, where, in the essay on 'Light and Shade,' the remark occurs: "I began to write this on the 23rd of April, 1490, when I also re-commenced working at the equestrian statue." And in a letter to the Duke, of which, unfortunately, we do not possess the date, Leonardo complains of the arrears of his salary, adding: "I say nothing of the horse, because I know the times." Besides, as we shall see farther on, in 1490 and 1495 Leonardo was away from Milan.

As is well known, it was by sheer injustice that Lodovico came to succeed his father, usurping, as he did, the rights of his nephew Gian Galeazzo Sforza. Yet Francesco, the founder of the dynasty, was himself an usurper; it can thus be well understood that it was in Lodovico's interest to perpetuate his father's memory by so pretentious a monument.

The chronicle of the way in which Francesco contrived to reach the throne of Milan forms an interesting episode in the history of Northern Italy. When in the year 1447, the last of the Visconti, Duke Filippo Maria, died, the burgesses of Milan declared monarchy to be nothing short of *pessima pestilenza*. But Francesco Sforza, the *condottiere* and quondam general of the republic in her war with Venice, and who afterwards himself fought against Milan, was urged by his successes to add yet further to them, when, as newly elected duke, he made his triumphal entry into that city. This seemed, in truth, a fit reward for the herculean labours of a warrior who had spent his life in untiring combat with nearly all the powers of Italy. On entering Milan, so history relates, the victorious *condottiere*, seated upon his horse, was thus borne aloft upon the shoulders of the populace; in such way the conqueror passed on towards the splendid cathedral, there to offer up his gratitude to Heaven. Perhaps it was just the glory of that triumph which Lodovico was mindful of when he gave Leonardo the commission for the equestrian figure in bronze. Monuments of that kind are not now to be met with in Florence, although it was not unusual to erect statues in honour of the leading heroes of the republic. In the monuments to the two *condottieri*, John Hawkwood (d. 1394) and Niccolo Marracci da Tolentino (d. 1434), the artists, Paolo Uccelli and Andrea del Castagno, have

certainly shown them on horseback, but these are simply mural paintings on the entrance wall of the Florentine cathedral. In Venice, however, where a horse is never seen, the erection of equestrian figures in the fifteenth century became all the more common; and with the growing demand for them the aid of Florentine artists was needed. Thus in Padua, Donatello in 1443 completed his mounted figure of Gattamelata, the commander of the forces of the Venetian republic. It was the first large casting that had been made in Italy since classic times. The year 1495 saw another such monument in the statue to General Colleoni—the last work of Leonardo's master, Verrocchio. In the celebrated Windsor collection of Da Vinci's sketches, there are three of the statues in question, drawings probably made to aid the master in his own work. Among these we find numerous designs for the monument which he himself executed; they are well-nigh all that can compensate us for the loss of the original. Leonardo's scheme had, perhaps, this radical defect: it was far too pretentious ever to be thoroughly realised. The Venetian republic would have easily enabled him to carry out such a design; the Duke of Milan, on the other hand, grew hourly more and more hampered by the lack of money. Thus this equestrian statue played just such a part in the story of Leonardo's career, as did the tomb of Pope Julius in that of Michelangelo.

Leonardo's drawings at Windsor embrace not only all the stages of his work; they also give us an insight into those projects which never reached completion; namely, the casting of the figure and its pedestal. Some are studies of the horse only; others of both horse and rider; in some the horse is represented stepping; in others it is

rearing and trampling a fallen warrior beneath its hoofs. But of all the sketches in the Windsor collection, that drawn in silverpoint on blue tinted paper is the only one in which the head of the rider bears a close resemblance to the Duke of Milan's portrait. This should not surprise us when we consider that, in his preliminary designs for a composition, an artist is never at pains to make a faithful likeness. Among these drawings there are some which seemingly serve no purpose in the completion of the statue, as, for instance, the one of a prancing steed overturning a vase with its fore-foot. Here we have probably only the motive for an ornamental statuette of some sort. After an accurate comparison of all the designs, it becomes indeed difficult to affirm which of them correspond to the work which was actually carried out. The sketches in which the quality of action is more insisted upon, are probably the earlier ones; and these were followed by studies of the recumbent warrior beneath the feet of the galloping horse. It is a act of great importance that in nearly all these drawings the right arm of the rider holding the staff, is vigorously stretched backwards, not held above the horse's head, as in a drawing in the Munich Gallery, which M. Courajod supposes to be a copy of the lost original. This drawing was probably done by the Florentine artist Pollajuolo, and, to judge by the style of its composition, it is with difficulty that we can ascribe it to Leonardo. Great differences are also to be noticed in his designs for the pedestal. One of them shows an architectural treatment of an ornamental shrine containing a sarcophagus of the Duke. Those again in which the statue is made to surmount a triumphal arch, like that of Constantine in Rome, have a very imposing effect.

Several sketches by Leonardo in the Windsor collection show us the artist's design with regard to the casting of the statue. In most of them the horse is drawn without any rider; only in one is it bestriden by the figure of a warrior, which here again stretches the left arm backwards holding a baton. It is worthy of remark, that in



all these sketches, the horse is walking quietly, like the equestrian statues of Donatello and Verrocchio. This last drawing contains detailed explanations as to the method of casting; and to our surprise we discover it to have been the master's intention

to cast the model in separate parts which were afterwards to be joined together. The explanations given are of so elaborate a kind as to lead us to believe that the accompanying sketch was the one finally decided upon. If our supposition be a correct one, it certainly answers once and for all the vexed question as to the real designs for the statue of Francesco Sforza.* Yet this need not compel us to differ with Giovio, the historian, who, describing the statue as he himself may have seen it, writes: "He also modelled a colossal horse for Lodovico Sforza, which was to be executed in bronze, with his father Francesco, the celebrated general, seated upon it. From the wonderful animation and energy with which this is depicted, we can see how thorough a knowledge the artist had of both nature and the plastic art." The expressions are nearly identical with those used by Vasari when describing the Gattamelata statue and Verrocchio's

* See Appendix, Note 2.

statue in Venice, where the horse is also shown in the attitude of walking.

Leonardo had declared that, in order to cast the statue, one hundred thousand pounds of bronze were required. To provide this was no easy matter. The anonymous biographer mentions another check to its completion. He tells us: "In Milan he erected a colossal horse, with the Duke Francesco Sforza as rider; in truth, a splendid work. It was to have been cast in bronze, which was commonly believed to have been impossible, especially as it was Leonardo's intention to cast it in one piece. The work remained unfinished." We can confute this latter statement by Leonardo's own manuscripts, which are now at Windsor. In Italy at that time the method of casting in bronze for large works of that kind had been re-adopted by Donatello and Verrocchio with much success. Nor can Leonardo's undertaking be termed an utterly unparalleled one. In Barletta there is still a Byzantine statue in bronze of an emperor, which is close upon fifteen feet high. Luca Paciola, in his '*Trattato de Divina proportione*' (Venice, 1509), states the height of Da Vinci's equestrian statue to have been twelve braccie, which is about twenty-six feet.* We have no reason to dispute this; but in the face of the fact it is utterly impossible for us to imagine that the horse can have been represented galloping as has been hitherto supposed. We can thoroughly understand how full of enthusiasm Leonardo must have been as long as he really believed that his work would reach completion. In one of his letters we read the following energetic sentence: "Let yuor eyes be opened ;

* The bronze statue of Prince Albert in the Memorial in Kensington Gardens is only half as high.

and believe me when I tell you that Leonardo of Florence, who is at work upon the bronze horse of the Duke of Francesco, needs no commissions from you; for I know full well how to employ the days of my life." * In the year 1493, on the occasion of the marriage of Bianca Maria Sforza with the Emperor Maximilian, the model of the equestrian statue was publicly erected on the Piazza del Castello, now the Piazza d'Armi, under an improvised triumphal arch, where it became the wonder of all Milan. Lazzaroni † and Taccone, the poets who have described the nuptial festivities, give us brief but decided information on this point. One bard, by name Lancinio, exclaims:—

“Expectant animi, molemque futurum
Suspiciant; fluat æs; vox erit; ecce Deus.”

We cannot by any means assume with Vasari that the model was only completed in clay, for after it had stood for years in this place, arrangements were entered into for its removal to Ferrara.

Vasari tells us that “this model remained as he had left it until the French with their King Louis came to Milan, when they totally destroyed it.” Sabba da Castiglione, who in his youth may have seen the statue, thus confirms the tale of its destruction. “The model of the horse, at which Leonardo had worked for sixteen years, thanks to the ignorance and negligence of those who could neither understand nor value genius, was abandoned to destruction. Thus did this wonderful work become a target for the Gascon archers.” Yet we shall scarcely find the whole truth in these reports, for, two years after Milan had been sacked by the French, the Duke Ercole I.

* ‘Codice Atlantico,’ fol. 316.

† See Appendix, Note 3.

d'Este of Ferrara, in a letter recently discovered by Campori, believes the monument to be still in existence. This prince, being anxious to adorn his capital, had given a commission for an equestrian statue to some obscure artist, who died before he was able to complete his work. On the 19th of September, 1501, Ercole writes to his agent in Milan as follows :—

“Seeing that there exists at Milan a model of a horse, executed by a certain Messer Leonardo, a master very skilful in such matters, one which the Duke Lodovico always intended to have cast, we think that if the use were granted us of this model, it would be a good and desirable thing to make a casting from it. Therefore, we wish you to go immediately to the most illustrious and reverend the Lord Cardinal of Rouen and acquaint him with our desire, begging his reverend lordship, if he do not need the said model himself, to be so good as to make it over to us. We would not deprive him of anything that he holds valuable, yet we are persuaded that he cares but little for this work. You may add, likewise, that this will be very agreeable to us for the reasons aforesaid; and that we would gladly be at pains to remove it, bearing in mind that the said model at Milan is, as you have told us, falling daily into decay, there being no care taken of it. If the very reverend lord will gratify us, as we hope, in this matter, we will send persons to bring the said model hither with all care and due precaution, so that it come by no hurt. Do not fail to employ all your good offices that our petition may be granted by his very reverend lordship, to whom prefer our offers of service and our humble duty.”

The Cardinal of Rouen mentioned in this letter was

at that time the French governor of Milan. Giovanni Valla's reply is dated the 24th of September, in which he says: "With reference to the model of the horse erected by Duke Lodovico, as far as he is concerned, his reverend lordship perfectly agrees to its removal; yet as his Majesty the King had himself seen the statue, his lordship dare not grant the Duke's request without previously informing the King." This is the last news which we get about the work.

It is not likely that Louis the Twelfth, who died in 1515, troubled himself any further about the monument; and when his successor Francis, who was Leonardo's patron in the early years of his reign, entered Milan, it had been almost wholly destroyed. It is now utterly lost. In the year 1559, Maria de' Medici wrote to Michelangelo: "I have decided to have a statue made in bronze of my lord* on horseback, a work which in size must befit the courtyard of a palace." Michelangelo was to have been entrusted with the execution of this, but he did nothing more than a single sketch for it. At that time, the easiest plan would have been to make use of Leonardo's model, if Louis the Twelfth had really brought it with him over to France.

Paolo Giovio, in his 'Lives of Celebrated Men,' gives an accurate description of Francesco Sforza's personal appearance, and, if judged by this standard, the so-called copies of the original statue fall very far short of the mark. They certainly cannot be said to possess any of those characteristics of which the historian in his subtle and penetrating manner has told us, characteristics which

* Henry II. of France (d. 1559).

have leading claims to be deemed authentic. "The Duke," so Giovio writes, "was tall in stature and thin withal, the calves of his legs being more muscular than shapely. His chest and shoulders were broad, and he had a military bearing. As the result of abstemiousness, his waist was so unusually small that he could span it with both hands. His features were plebeian in type, and his countenance forbidding in aspect, with a sallow, discoloured complexion. His bluish-grey eyes, set deep in the head under bushy brows, were gloomy in expression; he had a prominent nose, not aquiline in shape, and thinly-formed lips. The Duke was always clean shaven, with closely cut hair; and he generally wore a cap of conical shape."* Here we have a description of the Duke Francesco's appearance, which we may well suppose to have been written when Leonardo's statue was yet fresh in the author's recollection.

It is probable that as long as Da Vinci remained at Milan in the Duke's service, his talents and his activity were more directed to engineering than to art. A very great portion of the manuscripts which he has left behind him treat of the solution of geometrical and technological problems, and relate especially to matters connected with hydraulics. It was he who undertook the regulation of the beds of the rivers in Lombardy, earning thereby the lasting gratitude of the country. Our knowledge of his work as an architect can only be gathered *en passant*. We know that in conjunction with Francesco di Giorgio of Siena (1439-1502), who is better known as a painter, Leonardo was consulted by Gian Galeazzo as to the con-

* Pauli Jovii 'Vitæ illustrium Virorum,' Basilee, 1578, ch. 87.

struction of the cathedral of Pavia. A record of this journey we possess, perhaps in one of his drawings at Milan,* representing the cloister of Santa Maria in Pavia. In one of the documents at Milan four artists are mentioned as being "Ingeniarii ducales."

Bramantus ingenarius et pictor,

Jo. Jac. Dulcebonus, ingenarius et sculptor,

Jo. Jac. Batagius de laude, ingenarius et murator,

Leonardus de Florentia, ingenarius et pinctor.

That Bramante is here mentioned shews us that the title engineer is also meant to include that of architect. In 1487 Leonardo was commissioned by the authorities to prepare a model for the cupola of Milan Cathedral. Within the space of six months a salary of ninety-three lire and fourteen soldi had been paid to him. Three years later Leonardo asked to have his model back again, as no use had been made of it. Nevertheless, in 1510, his name appears as a member of the committee appointed to superintend the erection of the cathedral.†

Court life at Milan was one rapid succession of gaieties. On each and every occasion Da Vinci was called upon to act as manager-in-chief; and perhaps it was his efficiency in this and like capacities which won him most favour in the eyes of the Duke. It is certainly noteworthy that, although he was far more often engaged as a contriver than as a painter, it is Leonardo the artist, rather than Leonardo the skilful engineer, whom his contemporaries have chosen as the object of their admiration.

* 'Codex Atlanticus.' See Amoretti, 'Memorie Storiche,' p. 159.

† C. Calvi, *Notizie dei principali professori di belle arti che fiorirono Milano durante il governo de' Visconti degli Sforza*. Milano, 1869. Parte iii. Docum. iii-ix. and xxviii. and pages 18-20, 22-24, 56-57.

Bellinzoni the poet, in his verses commemorating the glories of Gian Galeazzo's wedding festivities, speaks thus of the ducal court:—

“Qui come l'ape al mel vienne ogni dotto,
Di virtuosi ha la sua corte piena,
Da Fiorenza un *Apelle* ha qui condotto.” *

And in another passage:

“Del Vinci e suoi penelli e suoi colore
I moderni e gli antichi hanno paura.” †

Gian Battista Strozzi, the Florentine, writes of the painter in a similar strain, where, punning upon his surname, he says:

“Vince costui pur solo
Tutti altri, e vince Fidia e vince Apelle,
E tutto il lor vittoriosa stuolo.” ‡

Ariosto, who mentions Leonardo in the following lines, together with Mantegna and Gian Bellino, terms him the greatest artist among his contemporaries.

“E que i che furo a nostri di et son horo
Leonardo, Andrea Mantegna e Gian Bellino.”

This, the opinion of poets, may be looked upon as the universally accepted one respecting Leonardo.

There are yet some smaller paintings of his produced

* “As comes to honey-laden flowers the bee,
So hither come the learned; and his court
Is filled with cunning artists; also he
Has from fair Florence an Apelles brought.”

† “Da Vinci, colours and his brush in hand,
In awe makes men of old and moderns stand.”

‡ “He alone
Vanquished [vince] all others, Pheidias he surpassed,
Surpassed Apelles and the conquering troop
Of their proud followers.”



FEMALE HEAD.

A DRAWING. IN THE GALLERY OF THE UFFIZI, FLORENCE.



in Milan which call for mention. As Vasari tells us Leonardo embellished the other wall of the convent refectory, where "opposite to that of the *Last Supper* he painted the portraits of the Duke Lodovico with that of his first-born son, Maximilian, and of the Duchess Beatrice with Francesco, their second son." No trace, however, remains of the frescoes, which were done in oil, and which Vasari himself saw. It is highly probable that these portraits constitute the unfinished work to which the Duke alludes in his 'Memoriale,' about the completion of the *Last Supper*. From this we should infer that they were executed between the years 1497 and 1499.

We are also informed that Leonardo painted the portraits of *Lucrezia Crivelli* and *Cecilia Gallerani*, mistresses of the Duke. At some time during the last century both these pictures were to be seen in Milan; since then they have totally disappeared. According to Amoretti, the artist did not represent the last named simply as she was; he idealized her as a Madonna, who, with one hand round the infant Christ, raises the other in the act of benediction.

The following couplet beneath the picture served as clue to its meaning:—

"Per Cecilia qual te orna, lauda e adora,
El tuo unico Figliolo, o beata Vergine exora." *

As regards the portrait of *Lucrezia Crivelli*, it has

* "In
Cecilia thus adorned like thee
O Blessed Virgin thee we praise,
And thy dear Son, and ceaselessly,
Our hearts in adoration raise."

been recently conjectured, without foundation, however, that it can be recognised in the picture No. 461 now in the Louvre. To us it seems well nigh inexplicable that these paintings should have thus been lost, works by a master who at all times has been held in honour.

Among Leonardo's manuscripts we shall find the following project for an allegorical composition, of which perhaps nothing more than a sketch was ever made.

"The Duke (il Moro) to represent Fate, his hair, hands and robes seen in front. Messer Gualtieri advances towards him, and grasps the hem of his garment in a respectful manner. Poverty, in the form of a horrible apparition, follows at the heel of a youth, whom the Duke shields with his robe, while with a gilt staff he threatens the phantom."

Compositions such as this one are by no means uncommon from the master's pencil; the difficulty lies in solving their meaning, especially when the allegory refers mainly to the occurrences of a particular epoch. In the British Museum, at Christ Church College, Oxford, and in the Louvre collection there are several sketches of this kind; but we never find such subjects treated on canvas.

Lomazzo, in his 'Trattato,'* mentions a painting by Leonardo in the church of San Francesco in Milan. It represents the *Annunciation of the Virgin*. The same writer in another passage† refers to Leonardo's activity as a sculptor, and his statement is well deserving of belief when we remember that in his youth Lomazzo was personally acquainted with the master. He says: "I have in my possession a small head in terra-cotta of an infant Christ, modelled by Leonardo da Vinci himself, a

* At p. 132.

† At p. 127.

figure striking in its infantine simplicity and purity of expression, yet not without a certain look of dignity and wisdom, the seeming outcome of matured reflection and experience. Notwithstanding, this in no way robs the countenance of its boyish charm; in truth, an excellent work."

He further tells us that a sculptor of Arezzo, named Leo, possessed a bas-relief of a horse done by Leonardo. Only recently one of the finest pieces of Renaissance sculpture in the Louvre, the life-size bust of Lodovico's wife, Beatrice d'Este, has been ascribed to Da Vinci.* The workmanship is of extraordinary delicacy, but hardly reaches the master's high standard; it is probably only a work of the Lombard school, of which we have several excellent examples in the South Kensington Museum.

In most cases it is a very difficult task accurately to determine the precise epochs to which Leonardo's drawings belong. The following list, found among the manuscripts of the master, should help us in this respect; it certainly forms an interesting summary of the different studies with which he was occupied at one period of his activity.

1. Head of a youth, seen full face, with fine hair.
2. Studies of flowers from nature.
3. A head, full face, with curly hair.
4. Some studies of St. Jerome—beneath a figure.
5. A head of the Duke.
6. Sketches of various groups.
7. Four drawings for the panel picture of Sant' Angelo.
8. The history (storietta) of Girolamo da Feghine.
9. A head of Christ, drawn with pen.
10. A figure of St. Sebastian.

* L. Courajod, in the '*Gazette des Beaux-Arts*,' 1877, 330-344.

11. Several studies of angels.
12. A head, in profile, with fine hair.
13. Head, with face uplifted, being the portrait of Atalanta.
14. The head of Geronimo da Feghine.
15. The head of Gianfrancesco Borro.
16. Studies for throats of old women.
17. Several heads of old men.
18. Many entirely nude figures.
19. Studies of attitudes and limbs.
20. A Madonna (finished).
21. One seen nearly in profile.
22. The head of the Madonna who ascends to heaven.
23. Head of an old man, with long mantle.
24. Head of a gipsy woman.
25. Head covered by a hat.
26. Model representing Christ's Passion.
27. Head of a child, with plaited hair.

In the foregoing list a head of Christ (No. 9) is mentioned, but this cannot be identical with Leonardo's drawing of our Lord crowned with thorns, preserved in the Academy of Venice, as that is done in silverpoint. The sketches Nos. 4 and 10 can easily be recognised as those now in the Windsor collection. Genuine drawings by the master are fortunately not rare. "They are innumerable," says the anonymous biographer; and he does not much exaggerate. It is very remarkable that in many cases we find several accurate reproductions of the same drawing, as for instance the wonderful allegorical composition in the British Museum of a dragon and a unicorn fighting with dogs, while a youth seated near, flashes a mirror in the rays of the sun. An exact replica of this is to be found in the Louvre. In the library of the King of Italy, at Turin, where are several most valuable original drawings by Leonardo and his school, we are able to



HEAD OF CHRIST.

From a Drawing in the Academy, Venice. By Leonardo.



recognise the only authentic portrait of the master done by himself. This is executed in red chalk, and the more or less indifferent copies of it, occasionally believed to be originals, are in the Academy of Venice and elsewhere. There are countless reproductions of his caricatures of heads, to which we shall refer later on. We can assume that in the sixteenth century deliberate forgeries were already in vogue; even Vasari, who took pleasure in collecting drawings of the old masters, has certainly at times been deceived. One of the chapters in Leonardo's '*Trattato della Pittura*,' gives another reason for the reproduction of these sketches. In a passage which is also of great importance in the criticism of drawings by other great masters, he says: "The young painter must, in the first instance, accustom his hand to copying the drawings of good masters; and when his hand is thus formed and ready, he should, with the advice of his director, use himself also to draw from relieves." *

* See '*Treatise on Painting*,' by Leonardo da Vinci. Translated by W. Rigaud, R.A., London, 1877, p. 95.





CHAPTER IV.

LEONARDO'S SCHOLARS IN LOMBARDY: THE "ACADEMIA
LEONARDI VINCI"—MILANESE ENGRAVINGS—THE FALL OF
LODOVICO SFORZA.

A CONSIDERABLE number of copies of some of Leonardo da Vinci's pictures were produced during his life-time, as for instance the *Mona Lisa*; generally speaking, these cannot be ascribed to his pupils, for as a rule they belong to a somewhat later epoch. The greater portion of those pictures of which we possess authentic record has now either disappeared or been destroyed. Lomazzo, by the way, in his 'Trattato dell'Arte della Pittura,' distinctly assures us that only a few of them survived. On the other hand, instances are all the more frequent where paintings have been ascribed to the master, which not only in execution but also the composition and design are obviously the work of his scholars. Perhaps the fact of there being so painful a lack of genuine works by Leonardo during his long stay in Milan, may account for the common wish to credit him with the more or less successful pictures of his pupils. This is especially the case with the panel pictures of the

Lombard master, Bernardino Luini, who in natural talent comes nearest to Da Vinci. Most of these are at present in England and nearly half of them are set down to Leonardo. A genuine picture of Luini's, splendid alike in colour and design, that of the *Youthful Christ surrounded by Four Scribes* (No. 18 in the National Gallery), was for a long time ascribed to Da Vinci. Although, in Luini's pictures, we can clearly recognise the influence exercised by Leonardo, they yet possess a distinct manner, a peculiar style of their own. Unfortunately we are without information as to the date of the birth and death of this master, nor is it certain where he was born, or where he died. The dates upon six of his pictures are the sole means by which we can judge when he lived. From these it is absolutely certain that he outlived Leonardo by at least fourteen years, and we may certainly conclude that Luini was one of the great Florentine's more youthful contemporaries. In the absence of actual data, the question must remain unanswered as to whether Luini ever visited the studio of Leonardo in Milan, or whether he was merely influenced by him. It is therefore in the widest sense only that he can now be termed one of Leonardo's pupils.

The town of Milan could boast other artists who had made their mark before Leonardo came upon the scene, as for instance, Vincenzo Foppa the elder, Zenale, Borgognone and others, who all kept more or less closely to the early Lombard style of painting, even after Leonardo's appearance. His advent was the signal for a general revolution; it was no more than could be expected. The earliest information as to Da Vinci's pupils is to be found in a memorandum written by the master himself. In one of

the manuscripts in the South Kensington Museum, we read: "On the 16th of March, 1493, came Julio the German to stay with me,"* and in another: "On the 24th of March, 1494, Galeazzo came to stay at my house, on the understanding that he should pay me the sum of five lire per month." Thus, like Raphael at first in Rome, Leonardo used to have his pupils under the same roof with him. Luca Paciolo, to whom we shall afterwards have occasion to refer, tells us himself that he shared a house in common with Leonardo for three years, from 1495 to 1498.

Vasari names Antonio Boltraffio, or Beltraffio, and Marco Uggioni as pupils of Da Vinci. The former, a member of one of the leading families in Milan, only practised painting *en amateur*, and very little is known of him. Besides the passage in Vasari, the only contemporaneous record we have hitherto possessed is his tombstone, now in the Brera at Milan. But among the valuable manuscripts of Leonardo in the Windsor collection, we find a note of Leonardo in which he says, that he engaged Beltraffio to make a picture.† It is owing to his position, perhaps, that his works are very rare. To the best of his pictures belong the *Madonna and Child* in the National Gallery (No. 728), and the large altar piece described by Vasari, entitled *La Madonna della Famiglia Casio*, now in the Louvre Gallery (No. 72). To quote the words of the anonymous biographer, "Leonardo had several pupils, among whom were Salai of Milan and Zoroastro of Peretola." He then gives the names of Florentine painters who later on attached themselves

* Adi 18 di marzo 1493, venne Julio tedesco asstare mecho.

† "Ricordo; vedi tonio (= Antonio) del beltraffio effalli trare una pittura."

to Leonardo. To judge by all existing evidence, Salai would seem to have been one of his favourite pupils. Unfortunately not a single authentic work of his has been preserved, and from this reason paintings have been unwarrantably ascribed to him, which, although undoubtedly of the school, do not correspond to the style of any of its well-known members. Among Leonardo's journals, we find a bill of the 4th of April, 1497, for a suit of clothes and a cap, which the master had ordered for Salai. And later, on 15th of October, 1507, he seems to have lent the latter money, on the occasion of his sister's wedding. Vasari specially brings him into notice: "Salai was a youth of singular grace and beauty of person, with waving curly hair, a feature of personal beauty by which Leonardo was always greatly pleased. This Salai he instructed in various matters relating to art, and certain works still in Milan and said to be by Salai were retouched by Leonardo himself."

Francesco Melzi was another of his favourite pupils, of whom we shall afterwards have to speak. Giovanni Pietrini, whose works are chiefly to be found at Milan, is only known to us by name. Paolo Lomazzo, best known by his treatise upon art, likewise counts himself among the followers of Leonardo. Two of his works form the most trustworthy of all available sources of information, respecting the great artist's life, although he is only casually alluded to therein. In the year 1584, his 'Trattato dell' Arte della Pittura' appeared, of which an English translation was published at Oxford in 1598. Less comprehensive was the other work, 'Idea del Tempio della Pittura.' It is in the former book only that we find in the brief notice upon artists a mention of

the influence exercised by Leonardo upon painters of the Lombard school. In his thirty-seventh chapter, Lomazzo maintains that Cesare da Sesto and Lorenzo Lotto were among Da Vinci's imitators, and notably praises these for their special skill in the management of light. Lorenzo Lotto was one of the principal artists of the Trevisan school, which was under the immediate influence of Giorgione. But his connection with Leonardo can in no way be vouched for; in the case of Cesare da Sesto, however, the proof is indisputable.

In the print-room of the British Museum there is an engraving of a female head seen in profile, whose youthful locks are crowned with an ivy wreath, and round about are inscribed the letters ACHA: LE: VI:—an abbreviation of *Academia Leonardi Vincii*. It was thus executed in the academy of which Leonardo was the director. The engraving is certainly not the work of the master himself, but was probably produced under his supervision. The few letters of this inscription have no small importance in the history of art, for from them we learn how the master's energy was employed in the conduct of an academy, where the reproductive arts were also taught. This is the first institution of the kind of which there is historical record; neither Florence nor Venice could at that time boast anything similar. As in the Middle Ages, so too in the Renaissance it was the rule for all who intended to become artists to choose the studio of any acknowledged painter where they could undergo a regular period of tuition. Even in the largest towns neither artist took precedence of the other; as members of a *compagnia de' pittori* they had a general bond of union. The object of these societies was the pro-

tection of the common interests of painters; they also had to pay a general subscription, as in the case of Leonardo when he first appeared in Florence as an independent artist. The rights of these associations were much the same as those of mercantile and trade guilds. St. Luke was universally their chosen patron saint, in consequence of the general belief that he was the first who ever painted pictures of the Madonna. The *Fabrica di San Luca*, said to have been in existence at Rome as early as 1470, is supposed to be the earliest record of an academy at Rome;* there is some doubt, however, as to the genuineness of the document which tells us this.† And when later, in Bologna and in Paris at the close of the sixteenth century and at about the middle of the seventeenth, institutions of a like nature and a like name were formed, under the name of academies, they were all of them called after the same patron saint. Both in constitution and organization the academy with which Leonardo was connected has more points of comparison with modern institutions than with any of the guilds of the Middle Ages.

The significant inscription, with the letters ACH : LE : VI : is also to be met with in the early Lombard woodcuts, which represents a knot wrapped up with geometrical intricacy. As is well known, Albrecht Dürer imitated this design, omitting the inscription; but it is very doubtful as to whether he had any direct connection with Leonardo's academy of art.

* Missirini, 'Memorie per servire alla storia della romana Accademia di S. Luca.' Roma, 1823, p. 4.

† Eug. Müntz, 'Les Arts à la cour des Papes.' Paris, 1879, vol. ii. p. 32.

Although it is not unlikely that Leonardo may have included engraving among his many accomplishments, we cannot state positively that he did so. Our only grounds for this belief are founded on an engraving now in the Print Room of the British Museum, of which no second copy exists, and which is believed by many connoisseurs to have been executed by the master himself. It is the half-length portrait of a female seen in profile, with hair plaited across the breast. "All tends to assure us," says M. d'Adda, "that we have before our eyes a true production of Leonardo. Even the evident inexperience in the hand-lines of the burin, the marks of which escape in places beyond the line of tracery, the firmness of the contours, the costume, the head-dress, and above all the forcible expression of the physiognomy betray the handiwork of the master." Other engravings, principally of horsemen, have also been ascribed to Da Vinci, which from a technical point of view are quite unworthy to be considered his; they are probably the work of scholars only, who took the master's drawings as a pattern.

Leonardo had been in the employ of Lodovico Sforza since the year 1482, and with the lapse of time his position grew gradually more and more precarious. It was doubtless in those last years that he wrote the letter already quoted, in which he speaks of the two years' arrears of pay. From a Latin document bearing the date of the 26th of April, 1499, we learn that the Duke gave him a vineyard which had formerly belonged to the convent of San Vittore. In this Leonardo is termed "*pictor celeberrimus*." At that time Lodovico was involved in the gravest political difficulties. All things seemed hastening



HEAD OF A WOMAN.

From an Engraving by LEONARDO, in the British Museum.

the final catastrophe of the overthrow of his tyranny. When in the summer of that year the Venetians and the French attacked the duchy of Milan, one town after another either through treachery or cowardice was forced to capitulate. By the 2nd of September, the Duke had already fled helplessly to the Tyrol, imploring the protection of the Emperor Maximilian, while his general in command relinquished the fortress of Milan with all its splendid supplies to the foe. With jubilant shouts the citizens hailed their new Duke in the person of Louis the Twelfth, King of France. While in exile, Lodovico had speedily rallied around him a band of Swiss, which was to help him in his task of re-conquest. His efforts were anticipated, however, for the people of Lombardy, goaded to revolt by the arrogance and rapacity of the French, with one accord recalled their banished prince. As in a dream Lodovico Sforza had lost his dukedom; in like manner did he seem to regain it. On the 5th of February, 1500, he had already re-entered Milan, and three months later, at Novara, he opposed the renewed attacks of the French, into whose hands, through the treachery of the Swiss, he fell a prisoner: he died ten years later in a gloomy dungeon of the Castle of Loches in Berri. Giovio passes judgment upon him in the following sentence: "A man of extraordinary sagacity but of boundless ambition, born as it were to bring about Italy's destruction."* On the other hand, Ratti has fitly termed him the Pericles of Milan. With his downfall Leonardo's public career at Milan came to an end for a time. It was just the greatest artists who in that

* *Histor. i. 6.* "Vir singulari prudentia, sed profunda ambitione, ad exitium Italie natus."

epoch could only maintain their position by the patronage of the leaders of the state. The foregoing events were doubtless in Da Vinci's mind as in the year 1500 he wrote thus: "The Duke has lost property, fortune and freedom; not one of his undertakings has he been able to complete."

Equally perhaps with Lodovico's misfortune, did Leonardo regret the destruction of his equestrian statue, that masterpiece which had cost him such infinite labour, doomed as it was to be abandoned to the tender mercies of a brutal soldiery. His only remaining alternative was to seek his fortune elsewhere.





CHAPTER V.

LEONARDO AT VENICE—HIS PORTRAIT OF ISABELLA GONZAGA
—RESIDENCE IN FLORENCE—IN THE SERVICE OF CESARE
BORGIA.

THE year 1500, observed by the Church as a year of jubilee, brought with it great political distress. Cæsar Borgia, the infamous son of a more infamous parent, that worst of popes, Alexander the Sixth, invaded northern Italy, allying himself with the troops which Louis the Twelfth had brought from western Europe. Milan could no longer form a home for the nurture of the fine arts. Not the master only, but also most of his pupils were forced for a time to quit the city. Report says that Leonardo instantly betook himself to Florence; this is, however, without foundation. In the archives of Gonzaga in Mantua, among a collection of documents of the ambassadors then resident in Venice, we find a letter in which Leonardo is mentioned as being in that city.* It is addressed "A la illustrissima Madamma Elisabetta Marchesana de Mantova," and is as follows:

"Most illustrious Lady,

"Leonardo da Vinci, who is in Venice, has shewed to me a portrait of your Highness, which is in every way

* See A. Baschet, 'Aldo Manuzio, Lettres et Documents,' Venice, 1867.

a most truthful likeness. Indeed it is so well executed that nothing could be better. This is all that I write by this post, and with the repeated assurance of my respect,

“I beg to subscribe myself,

“Your Highness’s faithful servant,”

“LORENZO DA PAVIA.

“Venice, 13th March, 1500.”

According to this letter, Leonardo, after the downfall of the Sforza dynasty at Milan, had gone to Venice, and while there, he probably visited the Mantuan ambassador.

Isabella Gonzaga was one of the most illustrious women of the Renaissance. She was in every way a strenuous upholder of the fine arts. In her cabinet, side by side with the treasures of antiquity, were to be seen works by the foremost artists of the age. In the annals of art and literature she has gained herself enduring fame, by the special encouragement and sympathy which she gave to such men as Ariosto, Mantegna, Correggio and Titian.

From the manner in which Lorenzo da Pavia speaks of Leonardo, we may conclude that his name was not unknown to the Duchess, but it seems that he had not been commissioned to paint the portrait in question. It may have been executed in Milan from a drawing or a miniature, or with some other picture as a guide. Francesco Gonzaga, the husband of the Duchess Isabella, was one of Lodovico Sforza’s allies before the French invasion of 1499, and, perhaps, through his connection with the court, Leonardo may have received a commission for the Duchess’s portrait. The question as to its ultimate fate is of yet greater significance; no public or private collection of the present day boasts its possession, nor even a copy of it. What, then, has become of the picture? We

do not find it mentioned in the lists of the art treasures of the castle of Mantua, but Père Dan, in the 'Trésor des merveilles de Fontainebleau,' published in 1642, tells us that a portrait of Isabella Gonzaga, painted by Leonardo, was in the collection of Francis the First, King of France. With the other pictures of this collection, it afterwards found a place in the Louvre Gallery, where it is still preserved (No. 461), being catalogued as an anonymous portrait by Leonardo. Previously it had often been engraved with the title of *La Belle Ferronnière*, as it was then supposed to be a likeness of the mistress of Francis the First; others again have believed it to be that of Lucrezia Crivelli. Yet neither opinion can be considered satisfactory. One might therefore be disposed to adopt the earliest theory respecting this picture, viz. that of Père Dan, did not other reasons compel us to reject such as inadmissible. In the year 1534, Titian was engaged upon a portrait of Isabella Gonzaga, for which she had herself given him the commission. With pardonable vanity, the Duchess, at that time no longer youthful, was unwilling that the great Venetian should immortalize her as an elderly woman, and she accordingly furnished the artist with a portrait taken in her youth, from which he completed the picture which now hangs in the Belvedere Gallery, at Vienna. A comparison between this, the authentic portrait, and the supposititious one in the Louvre, will speedily show us how impossible it is that they can be of one and the same person. The latter, by the way, was not done by Leonardo himself; it is the skilful work of a pupil, copied perhaps from a lost original of the master's.

We have a further proof that Leonardo went to Venice

on leaving Milan before he returned to Florence in one of his memoranda on page 229 of his manuscripts in the British Museum. As up till now this has never been published, it may not be thought superfluous to give it exactly as it stands: "Memo: that on this day (April 8th, 1503) I have given Salai two gold ducats, as he tells me that he wishes to have a pair of shoes made for himself with rose-coloured edgings, so that he has yet to give me nine of the twenty ducats which he owes me, eighteen of which I lent him in Milan and two in Venice." *

From the date given as well as from the context we can see that this was written in Florence. It therefore becomes evident that Leonardo when in Venice must have stayed there with at least one of his pupils. Elsewhere on the same manuscript we come across another memorandum which seems to refer to the master's connection with one of the patricians of Venice. On page 250 there is a pencil sketch of a horseman, or more probably the design for an equestrian statue with the words:

"Mess. Antonio Gri
Veneziano Chompagno
D'Antonio Maria."

Messer Antonio Grimani—for we must thus supply the missing syllables—is none other than the famous Doge who, as commander of the Venetian fleet, was defeated in 1499 at Lepanto, when he was deprived of his honours and forthwith imprisoned. He afterwards lived in exile with his son the cardinal Domenico Grimani at Rome, until, upon the death of his rival Loredan—whose portrait by Gian Bellino is now in the National Gallery—he became reinstated in his former office. It may not be so easy for

* See Appendix, Note 4.

us to determine who the Antonio Maria was, described in the manuscript as the Doge's companion. Perhaps it was none other than the Patriarch of Aquileja of that day.

Besides this drawing, the sheet contains a pen-and-ink sketch of a peacock under a dome-shaped roof, with the following explanation. "The helmet to be surmounted by a half-ball as type of our own hemisphere. On this is a peacock with rich plumage spread over the equestrian group. All the horse's ornament to consist of peacock feathers on a gold ground, a symbol of that Beauty which is derived from Grace.

"In the shield, a large mirror, which signifies that whosoever would have proofs of favour should make his virtue as a mirror.

"On the opposite side Valour has her place, holding a column and dressed in white, which has an allegorical signification. All are to be crowned (here a sketch of a crown), and Wisdom with three eyes (here a face is drawn with three eyes). The saddle-cloth to be of the purest cloth of gold, thickly sewn throughout with peacocks' eyes.

"On the left side there is to be a wheel which forms a circle behind the horse's haunches, and in this circle Wisdom appears clothed in red, and seated in a fiery chariot drawn by four horses, holding in her hand a laurel-branch, as emblem of Hope." *

The allegorical composition to which these fragmentary notes refer was probably destined as a decoration upon some festive occasion; Leonardo's written description of it is hardly a satisfactory one, but it should not influence us in forming our opinion as to the artistic merits of his conception. Michelangelo also, when writing about his

* See Appendix, Note 5.

allegorical statues in the chapel of the Medici, was wont to use language the reverse of intelligible. Still we have to confess that the allegorical sketches of Leonardo, most of which are now in England, are, and must remain, unguessed riddles, problems which any explanations such as the foregoing one do not encourage us to solve.

On the other side of the sheet on which are the drawings just mentioned, there is this brief remark: "Altogether something has been accomplished." Among the drawings of the master in the Royal Library at Windsor there are two sketches of Verrocchio's equestrian statue of Colleoni in Venice, probably done by Leonardo during his residence there, or drawn perhaps later from memory. And finally, the following note on p. 274 of the London Codex in the British Museum, may relate to the Venice period: "Stefano Cigi (for Chigi), famiglia del conte Grimani a santo Apostolo."

Leonardo's stay in Venice can only have been a short one. About a year after his visit to that town he must have been staying in Florence; and it was then that the Marchesa Isabella Gonzaga made an effort to secure the artist's services. We can conclude from his evasive answer to this appeal, that besides being at the time thoroughly indifferent to his position as a painter, he was not wholly his own master, nor free to act independently. We gain some information respecting this from the following letter addressed to the marchioness: *

"I have this week heard, through his pupil Salai and other of his friends, of Leonardo the artist's decision, which

* Document in the Archives of San Fedele at Milan. See C. L. Calvi, 'Notizie dei professori di belle arti che fiorirono in Milano durante il governo de' Visconti e degli Sforza,' Milano, 1869, vol. iii. p. 97.

led me to visit him on the Wednesday of Passion week in order to assure myself that it was true. In brief, his mathematical experiments have made painting so distasteful to him that he cannot even bear to take up a brush. However, I tried all I could, using first every art in order to get him to accede to your highness's wishes; and when I saw that he seemed well-disposed to place himself under obligation to your Eminence, I frankly told him everything, and we came to the following understanding, viz.: that, if he should be able to release himself from his engagement with the King of France without thereby forfeiting that monarch's goodwill (which he hoped might be managed in, at the most, a month's time), he would serve your Eminence in preference to any one else in the world. In any case, however, he will at once paint the portrait and forward it to your Eminence, as the small picture which he had to execute for one Robertet, a favourite of the King of France, is now finished. I left two with him, in order to expedite matters.* The little picture represents a Madonna seated, and at work with a spindle, while the Infant Christ, with one foot upon the basket of flax, holds it by the handle, and looks with wonder at four rays of light, which fall in the form of a cross, as if wishing for them. Smilingly, he grasps the spindle, which he seeks to withhold from his mother. Thus much I was able to fix with him. I preached my sermon yesterday. God grant that it may bring forth rich fruit, for the hearers were numerous. I commend myself to your Eminence.

"FRATER PETRUS DE NAVOLARIA,

"Vice-General of the Carmelite Monks.

"Florence, April 4th, 1501."

* Probably a reference to presents of some sort.

The Robertet mentioned in this letter was no other than Louis the Twelfth's all-powerful Secretary of State; who, according to the memoirs of the French marshal Robert de la Mark, was a man of exceedingly refined taste. Unfortunately, this picture which Leonardo painted has not been preserved; nor does even a copy of it exist.

In the year 1502 we find Leonardo in the service of Cæsar Borgia, then in the zenith of his power. He had left Rome in the June of that year in order to complete the conquests already begun of the districts south of the Po. Most of the states of Central Italy had already been forced to submit to his yoke. Ere long he had gained possession of Urbino through an act of infamous treachery; and Camerino had fallen into his hands in a like way. The lesser states of their own accord acknowledged his supremacy, and forthwith became obedient to his rule. Henceforth he was wont to style himself: "Cæsar Borgia of France, by the grace of God Duke of the Romagna and of Valence and Urbino, Prince of Andria, Lord of Piombino, Gonfaloniere, and captain-general of the holy Roman church." Lauded to the skies by sycophants, who hailed him as a successor to the Cæsars, the deeds of violence by which he sought to establish his kingdom knew no parallel. Nor can it be denied that the severity of his régime was in many respects beneficial, inasmuch as it secured for the Romagna an immunity from the rapacity of those who had long fed upon its strength. In 1502 he issued the following decree dated from Pavia:

"To all those of our *locotenenti, castellani, capitani, condottieri, ufficiali* and *subditi*, whom it may concern, we hereby charge and command them, that they everywhere and

in every place give free entrance to our highly-esteemed court architect Leonardo da Vinci, the bearer of this, who has been commissioned by us to inspect the fortresses and strongholds of our states, and to make such alterations and improvements as he may think needful. Both he and his followers are to be received with hospitality, and every facility afforded him for personal inspection, for measurement and valuation, just as he may wish. For that purpose a band of men is to be placed at his disposal, which is to give him all the help that he may require. With reference to the state works already in course of completion, we desire that every engineer be prepared to further any undertaking which he may find necessary."

No written authority could well be more absolute than was the foregoing. Leonardo da Vinci was now in the service of his former master's enemy; and although probably indebted to princely recommendations in gaining this important position, he owed it before all things to his incomparable abilities, which had been already tested, already admired.

When in the year 1499 King Louis the Twelfth entered Milan in triumph, Cæsar Borgia rode at his side. Paolo Giovio has told us with what wonder the French king gazed upon the large painting in the convent refectory; nor was the statue of Francesco Sforza without interest for him, albeit the monument of one whose dynasty he, as successor of the Visconti, had set out to destroy. It was then, if not before, that Cæsar Borgia's attention must have been turned to the great Florentine. Supposing Leonardo to have joined the tyrant in order to make him the offer of his services, it can scarcely have been a difficult task to convince him how valuable such services were.

7

As an engineer of nearly twenty years' standing, his efficiency in this respect might be attested by facts—facts which could endorse that confident statement of his powers, which at an earlier date he had sent to the Duke Lodovico. Cæsar Borgia's rule was certainly of very short duration. Already in the autumn of the year 1502 his *condottieri* had fallen from their allegiance. His conference with these at Sinigaglia at the close of the year resulted in the treacherous massacre of the greater part of them. In the January of 1503 he visited Umbria, where he found the barons in open revolt against his authority. He reached Rome in April, where later on, together with his father the Pope, he fell ill. With the death of the latter on August 18th his son's dominion naturally came to an end. Taking these facts into consideration, Leonardo's period of service cannot have exceeded, at the most, a year in length. Among his manuscripts we shall find many notes and memoranda which refer to his travels in central Italy while in the employ of Cæsar Borgia. From the dates which these bear, we conclude that, if he was in the Duke's suite at all, it can only have been for a short time. It is remarkable that while at these different places Leonardo seems to have been occupied with entirely other things than those instructions which he had come to carry out. Several of the *condottieri* were then in opposition to the Duke; these may have thrown difficulties in his path. According to Leonardo's own statement, he arrived at Urbino on the 30th of July, forty days after that splendid castle with its priceless treasures had fallen into the hands of Cæsar Borgia. Here he draws in his note-book a dove-cote and a staircase, with various approaches. On the 1st of August

he is in Pesaro, on the shores of the Adriatic, where he makes drawings of different sorts of machines. From there he goes along the coast northward to Rimini, which place he reaches on the 8th, and makes notes with reference to the supply of water for the town-well. By the 11th of August he gets to Cesena, where he sketches a house and gives a description of a carriage, as well as of the special mode of cultivating grapes, which was peculiar to that neighbourhood. On the 6th of September he makes a drawing of the harbour of Cesenatico, near Ravenna. Then, going south, he passes through Buonconvento to Casanuova, and thence to Chiusi, Perugia and Foligno. While at Piombino, opposite to the island of Elba, he seeks to define the laws which govern the wave-beats of the sea on the shore, making special notes respecting this. While at Siena, he is interested in a bell of extraordinary construction. Orvieto is the most southerly point which he mentions in his notes relating to these tours. Of far greater importance than these sparse memoranda, are the six geographical maps of different districts in the Royal Library at Windsor, drawn up by the master himself. The largest and most important of these is bounded on the north by the Val d'Ema near Florence, on the south by the lake of Bolsena, while Perugia and Cortona form its limit in the east, and in the west the districts from Siena adjoining the sea. The configurations of the earth are here given with the greatest accuracy, and the views of towns like Arrezzo, Siena and Volterra are rendered with such exact minuteness of detail, that they can be instantly recognised, even without the written text at the side, which is undoubtedly in the hand-writing of Leonardo. Another map on a far smaller

scale shows in the east the Apennines, and in the west it gives the coast as far as Corneto. All the many intricacies of the river-system are carefully given in detail. There are also two other maps, one large and the other small, which represent the lower course of the Arno, showing its mouth. It is, however, uncertain whether both these were completed while Leonardo was in the service of Cæsar Borgia. The smaller one has obviously been designed merely for the regulation of the river-course; the larger one, again, of the district between Lucca and Volterra was without doubt drawn up for the purposes of strategy. Similar in character to these is the map of the Pontine Marshes and the Volscian mountains. Here we find the Via Appia indicated, from Cisterna to Terracina and the sea, and the towns Sermoneta, Piperno and the Cape of Circe. Besides these, we find at Windsor a map of the town and the neighbourhood of Imola, with distinct indications of the fortifications.

These charts have a special value as works of art, owing to their exquisite finish of draughtsmanship and the clear and comprehensive way in which they have been designed. If we compare them with other and better-known maps of Leonardo's, as for instance the one of the Mediterranean* and the chart of the World† in the Royal Library at Windsor, the latter seem to be mere hurried and carelessly executed sketches. The six maps in question are the fruit of accurate labour and patient industry, as well as of a thorough scientific knowledge, in that day as unparalleled as were the marvellous gifts possessed by the great draughtsman, who in this, as in every other branch

* In the Milan 'Codex Atlanticus.'

† This, however, can scarcely be called a genuine work of Leonardo's.

of exact science, was far in advance of his contemporaries. Hitherto students of Leonardo and his works have paid scarcely any attention to these charts, which form part of the treasures of the Royal Library at Windsor. However, as we have said before, their genuineness is beyond question. The map of the Pontine Marshes has an additional biographical interest for us. Leonardo da Vinci when in the Duke's service was at one time south of Rome, and can we believe it likely that, when wandering from Bracciano to the Appii Forum, he neglected to visit the city of the Emperors?

The date of his return to Florence has hitherto remained uncertain; yet from a remark of the master's in the Codex of the British Museum we may conclude that it did not take place until the March of 1503, at the latest. The note on p. 229 is as follows: "Mem: that I, Leonardo da Vinci, on the 8th of April, 1503, lent to the miniature-painter Nanni four gold ducats. Salai was the bearer and delivered them to him; and he says that they shall be repaid within forty days."* Among the miniature-painters who at that time were employed in the illumination and ornamentation of the choir-books of the Florentine cathedral, was a certain Giovanni di Giuliano Boccardi, who it may be supposed, was the Nanni—short for Giovanni—mentioned by Leonardo. We have the proof of documents that an artist of that name was engaged in the year 1511 to illuminate an Evangelistarium and an Epistolarium.†

Without doubt Leonardo da Vinci came to Florence intending to stay there some time. His colleague Luca Paciolo states that until the year 1499 he was in the

* See Appendix, Note 6. † Vasari, ed. Le Monnier, vol. ii. p. 200.

service (*ali stipendi*) of the Duke of Milan, and that "after divers matters had taken place in those parts," the two friends went to Florence together, where they lodged in the same house. In spite of twenty years' residence in Milan, Leonardo was by no means absolutely estranged from the city of his birth. It is probable that during that period he may have gone to Florence more than once, if only for a short time. We have, for instance, decided information that in 1495 he was there for some weeks, perhaps for some months.

The November of 1494 saw the proscription of the Medici by public voice, while Savonarola the Dominican, like some second Cola di Rienzi, headed the Florentine republic during the period of four weeks. It was at his wish, so Vasari tells us,* that in the year following the Sala del Consiglio in the Palazzo della Signoria should be enlarged. Michelangelo, then but a youth of twenty, Giuliano da San Gallo (1445-1516) and Il Cronaca (1454-1509), who found in Savonarola a generous benefactor—all these were asked to join their judgment to that of Leonardo respecting the designs for this architectural improvement. After lengthy consultation, the plans were agreed upon, from which the hall as it now stands was built. The Giuliano da San Gallo here mentioned had been sent once before to Milan by Lorenzo de' Medici, where, as Vasari has it, he had dealings with Leonardo, and gave him the benefit of sound counsel respecting the execution of his equestrian statue.

In the environs of Florence there is also a work of art which seems to point to Leonardo's connection with that town during the last years of the fifteenth century. One

* In his life of the architect Simone, called Il Cronaca.

of the *salons* of the Palazzo Comunale at Pistoja contains a large sculpture in relief of two naked youths holding a weapon. This bears the date 1494. In the conception of these figures we can easily recognise the style of the great master; and when we remember that Leonardo was in Florence at this particular time, it is not improbable that he had a share in their design if not in their execution.

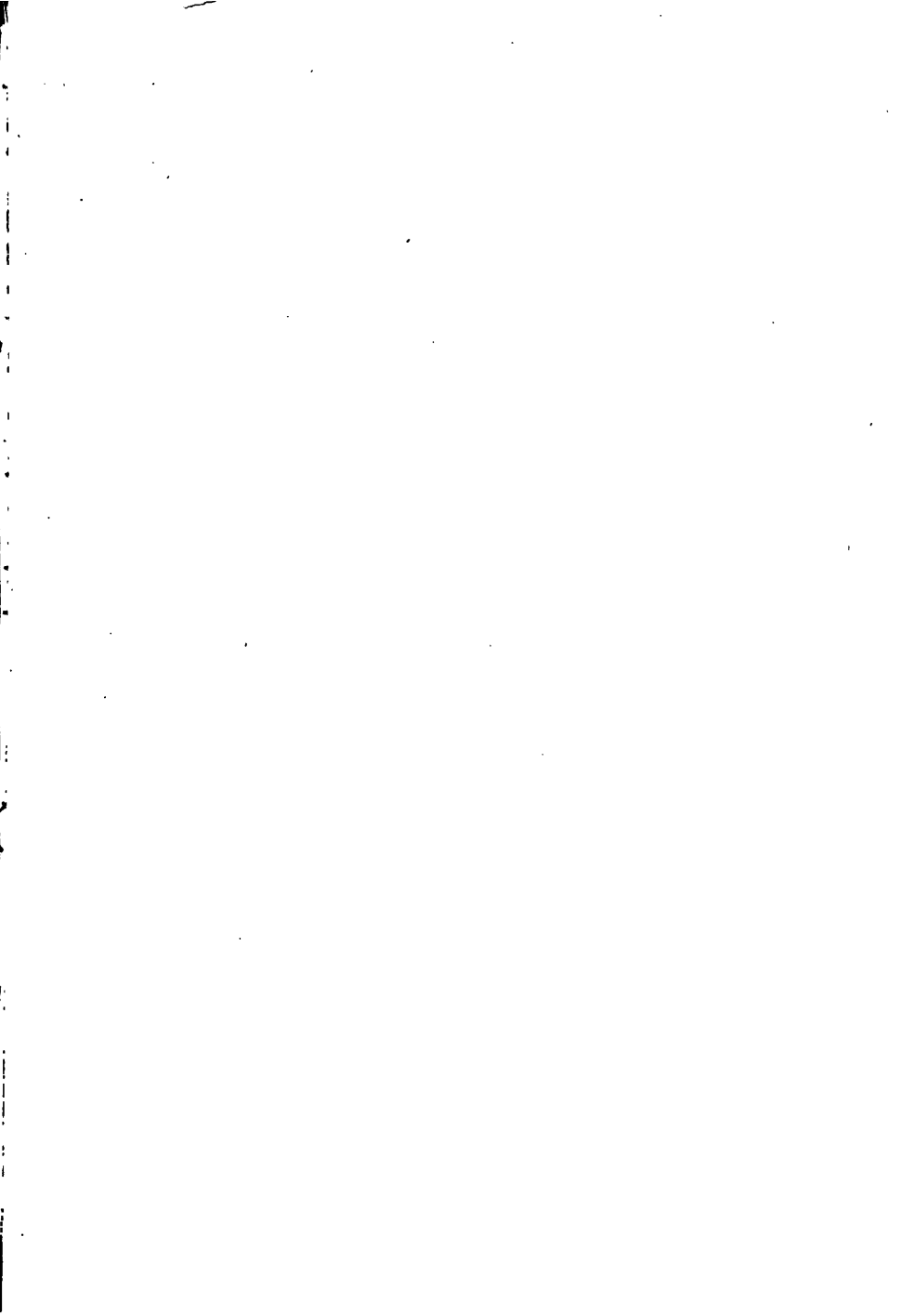
When Da Vinci in 1503 came to Florence, he probably meant to reside there permanently. In this and the following years his name appears in the account-books of the Compagnia de' pittori.* He was soon met by offers of employment. Vasari tells us "that the Servite monks had at that time commissioned Filippino Lippi to paint the altar-piece for the principal chapel in their church Santa Maria dell' Annunziata, when Leonardo declared that he would himself very willingly have undertaken such a work. This, being repeated to Filippino, like the amiable man that he was, he withdrew himself at once, when the monks gave the picture to Leonardo." The original contract signed by Filippino with the brethren of the Servi has been found in the Florentine archives and bears the date of 1503. Filippino had already begun upon his picture of the *Descent from the Cross*, in which the figures were life-size. Leonardo, however, was clearly disinclined to go on with this work. Vasari writes: "To the end that Leonardo might make progress with the work, the monks took him into their own abode with all his household, supplying the expenses of the whole, and so he kept them attending on him for a long time, but did not make any commencement; but at length

* G. Uzielli, 'Ricerche intorno a Leonardo da Vinci,' Firenze, 1872, pp. 164-5.

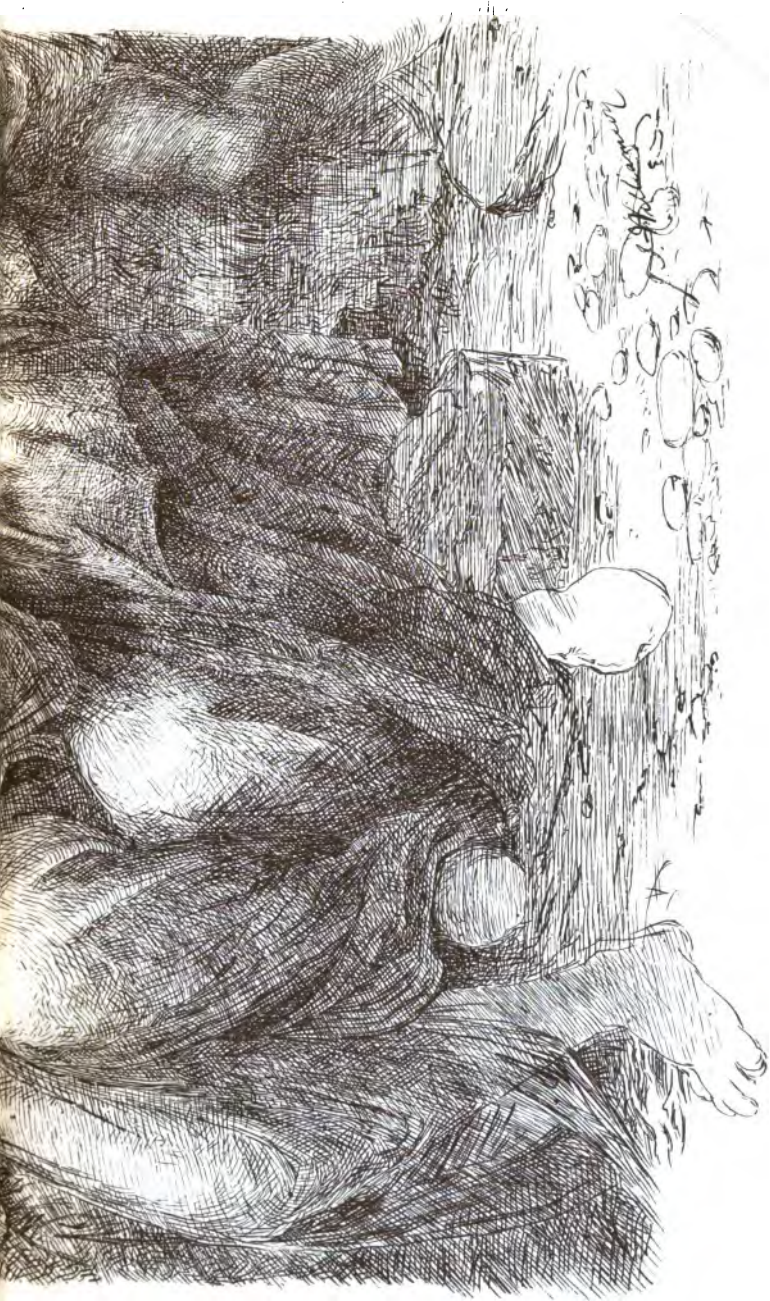
however he prepared a cartoon, with the Madonna, Sant' Anna and the Infant Christ, so admirably depicted, that it not only caused astonishment to every artist who saw it, but, when finished, the chamber wherein it stood was crowded for two days by men and women, old and young, a concourse, in short, such as one sees flocking to the most solemn festivals, all hastening to behold the wonders produced by Leonardo, which awakened amazement in the whole people. Nor was this without good cause, seeing that in the countenance of that Virgin there is all the simplicity and loveliness which can be conceived as giving grace and beauty to the Mother of Christ, the artist proposing to show her in the modesty and humility of the virgin, filled with joy and gladness as she contemplates the beauty of her son, whom she is tenderly supporting in her lap. And while Our Lady with eyes modestly bent down is looking at a little San Giovanni, who is playing with a lamb, Sant' Anna, at the summit of delight, is observing the group with a smile of happiness and rejoicing as she sees that her terrestrial progeny have become divine; all which is entirely worthy of the mind and genius of Leonardo. This cartoon was subsequently taken to France."

Lomazzo also informs us* of its removal to France, adding that in his time (1584) the cartoon was at Milan, in the possession of the painter Aurelio Luini, Bernardino Luini's son. And even in the meagre description of Leonardo's works by his anonymous biographer, it is this drawing that is singled out for praise. "His sketches are well nigh marvellous; among them is a *Madonna with St. Anne*, which was taken to France." This cartoon,

* 'Trattato dell' Arte della Pittura,' p. 171.

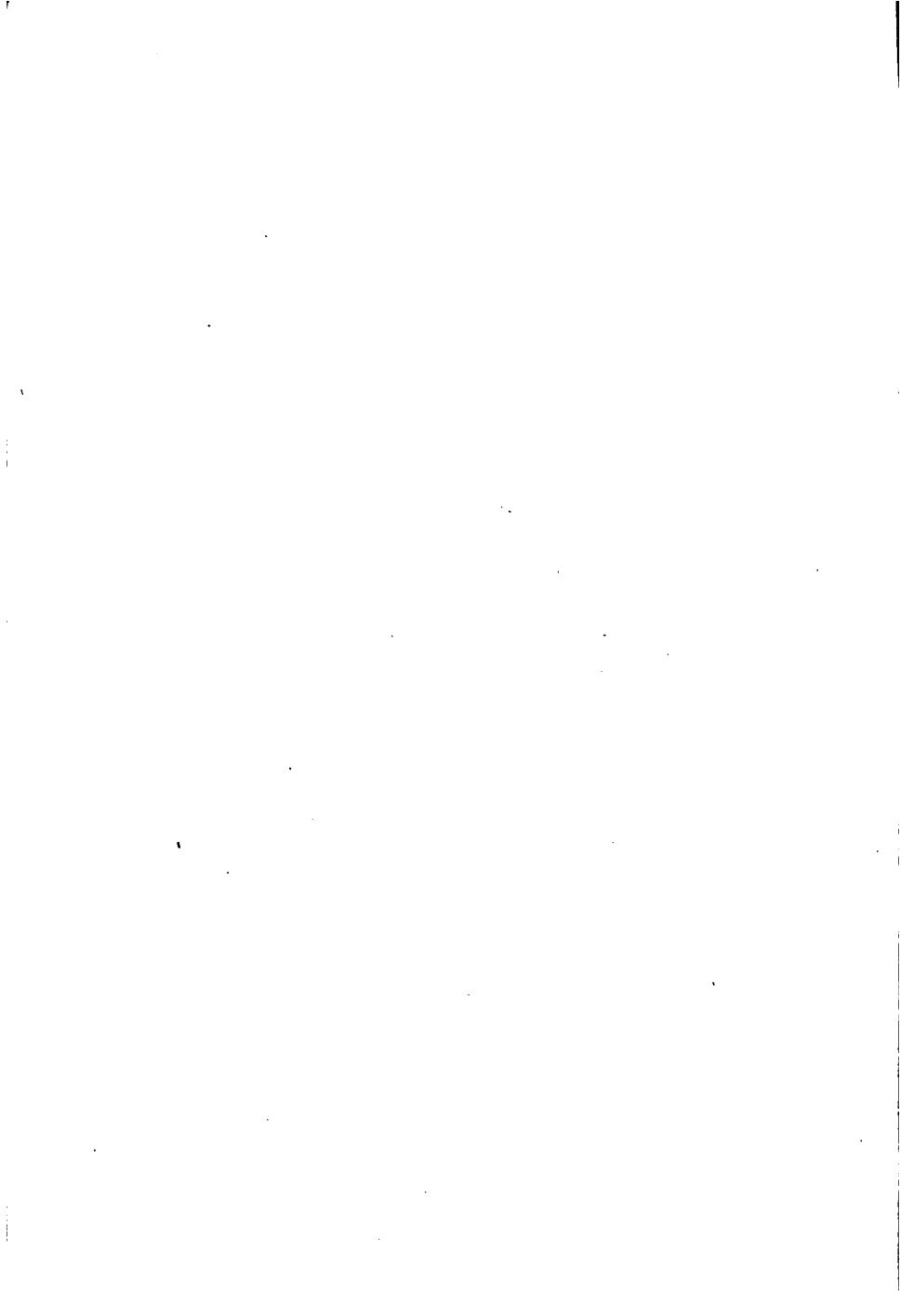






CARTOON OF THE VIRGIN AND HOLY CHILD, ST. ANNE AND ST. JOHN.

By Leonardo da Vinci. In the Royal Academy, London.



drawn in black chalk on white paper, the figures being half life-size, is at present to be seen in the Diploma Gallery of the Royal Academy. It is in a tolerably good state of preservation. Not the slightest doubt as to its authenticity remains, although there are two points in which it fails to correspond with Vasari's description. In the first place the drawing is here and there far from being complete; and secondly, John is not represented as playing with a lamb, as in a similar picture of the *Infant Christ* in the Louvre, which may have led Vasari into this error.

The composition of the group has perhaps not much that can appeal to our latter-day sympathies; for us the principal charm is the refinement in the expression of the figures. The conception is a thoroughly medieval one: the figure of the Virgin, who is shewn resting in St. Anne's lap, seems a return to the traditional symbolism of genealogical trees.

When, on completing this drawing, Leonardo neglected to work at the picture for which it was only a study, the monks cancelled their engagement with him, and requested Filippino Lippi to go on with his unfinished painting of the *Descent from the Cross*. Upon the death of this artist, in the April of 1504, it fell to the lot of Perugino to complete the lower portion of the panel, which now hangs in the Academy of Fine Arts at Florence. It is hardly necessary to comment upon the artistic inferiority of this carefully finished work, when compared with Leonardo's cartoon. How far greater would have been his success in art had he not habitually abandoned his designs and left his pictures in part unfinished! Indolence was not so much the cause of this, as the method in which he usually

practised his profession. Lomazzo informs us more fully upon this point.* "When setting to work to paint, it was as if he were mastered by fear. So also he could finish nothing which he had begun, his soul being full of the sublimity of Art, whereby he was enabled to see faults in pictures which others hailed as miraculous creations."

At this time Michelangelo, Leonardo's junior by some score of years, had won his first laurels. At the close of the year 1503, his statue of David "il gigante," was all but completed. By the 20th of January, 1504, an assembly of artists and notable burgesses was convoked, in order to fix a site for its erection. The protocol of these proceedings still exists.† The artists, it appears, held different views. Giuliano da San Gallo, the architect, was of opinion that a good position for the statue would be in the central arch of the Loggia de' Signori (now Loggia de' Lanzi) either placed in the centre, so that one can pass round on both sides of it, or in the background against the wall, with a dark niche behind it. Leonardo di Ser Piero da Vinci was the eleventh of the assembly who gave his verdict, as follows: "I am of Giuliano's opinion that it should be placed in the Loggia, against the background of the low wall, and with a proper amount of ornament, which, however, should not interfere with the actual uses of the hall itself." Finally, at the wish of Michelangelo, it was decided the statue should be placed near the door of the Palazzo della Signoria.

Deep at the bottom of his heart, Michelangelo cherished for Da Vinci a rooted dislike. The anonymous biographer

* 'Trattato dell' Arte della Pittura,' p. 114.

† Gaye, 'Carteggio inedito degli Artisti,' ii. p. 455.

of the latter artist relates an anecdote respecting this, an incident taken from Florentine street-life. "As Leonardo, accompanied by G. da Gavina, was passing the Spini bank, hard by the church of Santa Trinità, several notables were there assembled, who were discussing a passage in Dante, and seeing Leonardo, they bade him come and explain it to them. At the same moment Michelangelo passed, and on one of the crowd calling to him, Leonardo said, 'Michelangelo will be able to tell you what it means.' To which the latter, thinking this had been said to entrap him, replied, 'Nay, do thou explain it thyself, horse-modeller, that thou art—who, unable to cast a statue in bronze, wast forced with shame to give up the attempt.' So saying, he turned his back upon them and departed."

Michelangelo's statue of *David* was not yet erected when Leonardo had already begun to work upon the large cartoon which was to form the principal work of his Florentine period. Both he and Michelangelo had received commissions for large historical compositions for the Sala del Consiglio in the Palazzo della Signoria at Florence. Michelangelo chose to depict a scene from the Florentine wars with the Pisans, entitled *Soldiers Bathing*, while Leonardo's subject was the *Battle of Anghiari*, a victory gained by the Florentines (on the 29th of June, 1440) over the people of Milan. The undertaking was as magnificent as it was novel; hitherto scenes of profane history had but seldom been immortalised in this way, and certainly never on so large a scale. In order properly to appreciate and value Leonardo's production, we should glance for a moment at the battle-pieces of early Florentine art. Those by Paolo Uccelli, in the galleries of Florence,

Paris and London had been produced some seventy years previously. In their choice, however, of new problems in art, both masters seem alike to have striven to outstrip the age in which they lived. Yet the result is, in each case, enormously different. About the year 1455, Piero della Francesca produced his imposing picture of the conflict between the Persian cavalry and that of Heraclius. It is in the church of San Francesco, at Arezzo. In this fresco, as in the similar ones by Uccelli, the composition is made subservient to the laws which govern ancient plastic art. There can be no doubt that Leonardo was the first to introduce and to put into execution new rules which in works of this kind are of service even in the present day. We still possess notes in his handwriting, details of the battle which must have served as the basis of his composition.

The original painting has been destroyed, only a small copy of part of it being preserved; if we would gain an idea of the whole, we must follow the programme as it is set forth in the manuscript, even though we cannot be sure how closely it was actually adhered to. "Generals on the Florentine side: Niccolò da Pisa, Pietro Giampaolo, Neri di Gino Capponi, Count Francesco Guli Orsino, Benedetto de Medici, Micheletto, M. Rinaldo degli Albizzi, and others. It must then be shown how, after being armed, he took horse, and how the whole army followed him—forty squadrons of cavalry and two thousand infantry went with him. The Patriarch* ascended a mountain in the early morning, which commanded a view of the surrounding hills and valleys of the district; and he discovers Niccolò Picenino advancing from Borgo San

* Lodovico Scarampi Mezzarota, Patriarch of Aquileja.

Sepolero, his army being enveloped in a cloud of dust. He at once returns to the camp, where he gives his followers the various commands, and then prays to God with hands folded, whereat St. Peter appears in a cloud and comforts him. Five hundred horsemen are then sent forward by the patriarch to surround the enemy in case they should make an attack, or to prevent their doing so. The foremost ranks were under the leadership of Francesco, son of Niccolò Picenino. To the left, behind the bridge, he despatches infantry, under the command of Micheletto, to whose lot the generalship for that day had fallen. At this bridge a desperate fight ensues. Our men hold their ground and drive back the foe. But Guido and his brother Astorre, the lord of Faenza, being strongly reinforced, recover themselves, and the combat is renewed. This so harasses the Florentine army, that they recapture the bridge and press forward as far as the tents. Simonetto then attacks the enemy with a body of six hundred horse, forces them a second time to quit the field, and retakes the bridge. Behind him comes another army of two thousand cavalry, and the battle rages for a long time. Then the patriarch, in order to throw the enemy into confusion, gives orders for Niccolò da Pisa and Napoleone Orsini, a beardless youth, to advance with a large body of troops, and a second great military achievement is thus accomplished. Niccolò Picenino now pushes forward with the remainder of his forces, which again causes our ranks to waver, so that, had not the patriarch himself made an attack, and by word and deed lent courage to the commanders, we had been forced to seek our safety in flight. With the help of a body of artillery which the patriarch placed upon the hill, he made havoc among the enemy's

infantry. By these means they fell into so great confusion, that Niccolò gave orders to his son to withdraw his troops, when they fled to Borgo. Great was their defeat; only those escaped who at the first had taken refuge in flight, or had hidden themselves. The battle lasted until sundown, when the patriarch recalled his troops that they might bury the slain and erect a trophy." On reading this clear and vivid account of the particulars of the battle, we may conclude that it was the latter deciding phase in the day's combat which the artist chose to immortalise in his fresco. During the years 1504 and 1505, he worked diligently at the cartoon, and the following year saw him already engaged upon the wall-picture itself, for which he had a special kind of movable scaffolding constructed.

It was expedient that he should lose no time; Michelangelo was also busily at work. Each was naturally anxious to secure for himself the foremost share of the glory that was to be theirs. Nevertheless, of Michelangelo, we know only that he produced the cartoon of his work. Of Leonardo the anonymous biographer relates: "Following some hints which he found in Pliny, he prepared a special kind of stucco on which to lay on his colours; but this proved a failure. His first experiment therewith was when painting a picture in the Sala del Papa* upon which he had already begun to work. He had painted it on the wall, and burnt a large fire before it, so that the great heat might cause the colours to become absorbed and dried in. But this only happened in the lower portion where the fire was; it could not sufficiently heat the upper part, for it was a great distance off. Paolo

* By this is meant the Sala del Consiglio.

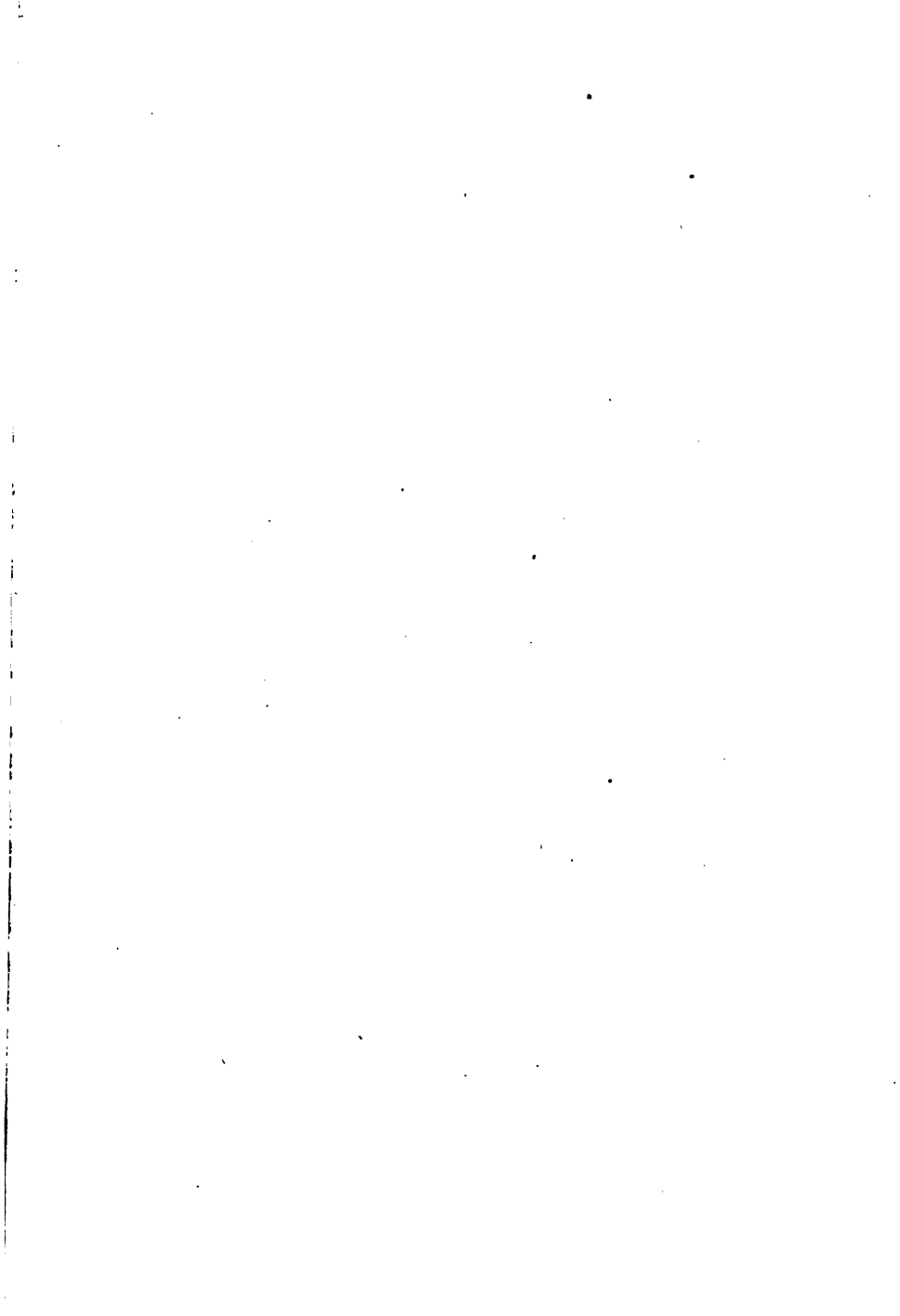
Giovio gives us more minute information respecting the technical details of the process, who expresses his opinion of the picture in the following words: "In the Town-hall of Florence there is Leonardo's painting of the *Battle and Conquest of the Pisans*, a splendid work, although an unsuccessful one, owing to the plaster of the wall, which would not take the colours that had been mixed with oil. Grieved at his unexpected failure, he allowed the work to remain finished." Vasari's account also tallies with this report. Perhaps the artist believed that he had once again discovered the method in vogue among the ancients, of painting on wax, in which, as we know, the process of burning-in was necessary. He must already have entirely abandoned the whole work in 1506, for in the summer of that year we find him at Milan, deeply engaged with other matters.

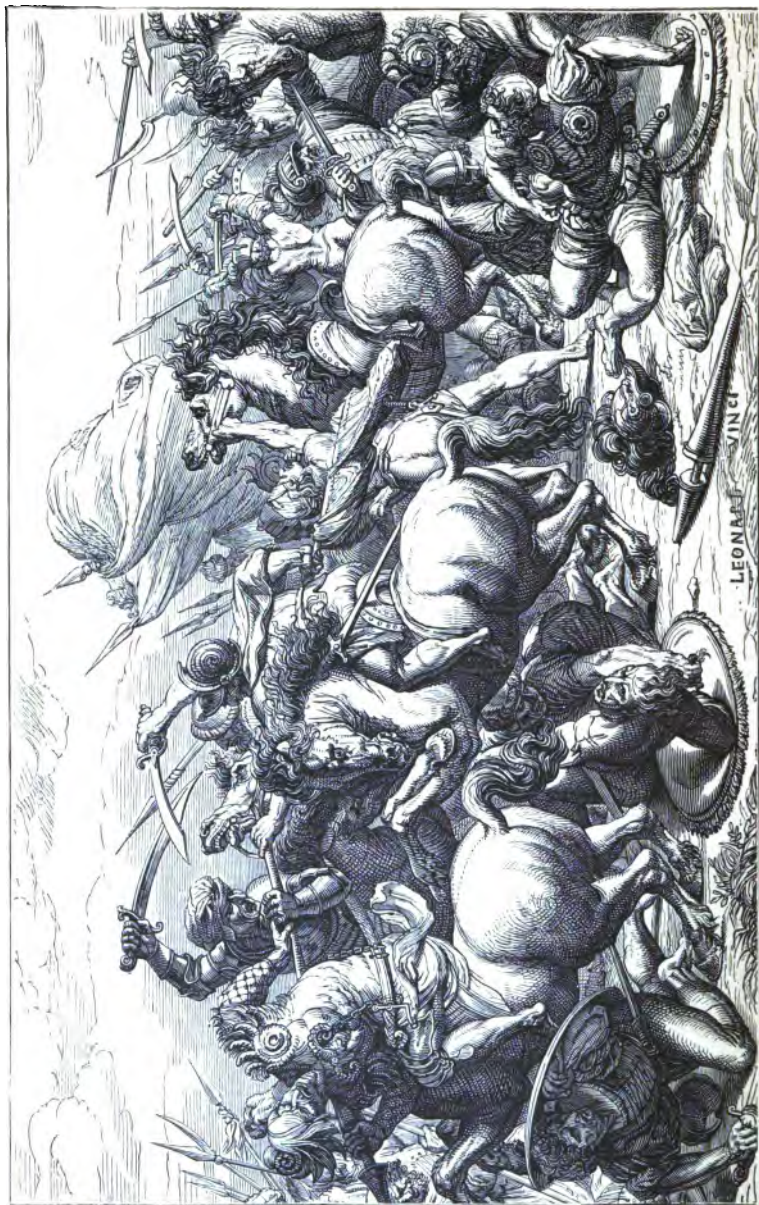
On the 18th of August the French Governor of that time writes from Florence to the Signory, requesting leave of absence for Leonardo, and Jafredus Kardi on the day following despatches a letter to the same effect. In reply to the latter, Pietro Soderini, the Florentine Gonfaloniere, on the 9th of October penned the following bitter lines: "Leonardo has not treated the Republic in the way in which he ought to have done. He has allowed a considerable sum of money to be paid to him, yet has made but a small beginning of his great work; indeed, he has acted like a traitor."* Vasari tells us that the Gonfaloniere's anger was mainly due to the fact that, relying upon his success, the artist had required money to be advanced to him from the state treasury. When with the aid of friends Leonardo was able to raise the

* Gaye, *Carteggio inedito degli artisti*.

sum in question, he wished to hand it over to Soderini, who, however, had sufficient sense to refuse it. The entire failure of his technical method can only have become thoroughly evident in the course of the next few years.

Albertini's *Memoriale*, dated 1510, specifies among other things to be seen in the new large Council Chamber, "The horsemen (*cavalli*) of Leonardo da Vinci and Michelangelo's drawings." In a carpenter's bill of the year 1513 we find the charge, "8 liv. 12. for putting boarding (43 ells in breadth) over the figures painted by Leonardo da Vinci in the great hall to prevent their getting damaged." This is the last news which we possess of the picture. Respecting its destruction we unfortunately know more than of its completion. Lucensi's engraving of the year 1558 was made only from a copy of the original, while, later on, Gerard Edelinck engraved his plate from a copy done by Rubens of the picture drawn with all the licence usual to that master, who finally blotted out the Florentine style behind his own. His copy shows, in fact, a pure Flemish taste, and nothing more; moreover these two engravings do not entirely correspond to Vasari's description of the original painting. He says: "Leonardo da Vinci represents the History of Niccolò Piccenino, captain-general of the Duke Filippo of Milan, in which he depicted a troop of horsemen fighting round a standard, and struggling for the possession thereof. Among other peculiarities of this scene, it is to be remarked that not only are rage, disdain, and the desire for revenge apparent in the men, but in the horses also; two of these animals, with their fore-legs intertwined, are attacking each other with their teeth, no less fiercely than do the cavaliers who are fighting for the





THE BATTLE OF THE STANDARD.
FROM THE ENGRAVING BY EDELINCK.

standard. One of the combatants has seized the object of their strife with both hands, and is urging his horse to its speed, while he, lending the whole weight of his person to the effort, clings with his utmost strength to the shaft of the banner, and strives to tear it by main force from the hands of four others, who are all labouring to defend it with uplifted swords, which each brandishes in the attempt to divide the shaft with one of his hands while he grasps the cause of contention with the other. An old soldier, with a red cap on his head, who has also seized the standard with one hand, and raised a curved scimitar in the other, is uttering cries of rage and fiercely dealing a blow by which he is endeavouring to cut off the hands of two of his opponents, who, grinding their teeth, are struggling in an attitude of fixed determination to defend their banner. On the earth, among the feet of the horses, are two other figures fore-shortened, who are obstinately fighting in that position; one has been hurled to the ground while the other has thrown himself upon him, and raising his arm to its utmost height, is bringing down his dagger with all his force to the throat of the enemy; the latter meanwhile, struggling mightily with arms and feet, is defending himself from the impending death. It would be scarcely possible adequately to describe the skill shown by Leonardo in this work, or to do justice to the beauty of design with which he has depicted the warlike habiliments of the soldiers, with their helmets, crests and other ornaments, infinitely varied as they are; or the wonderful mastery he exhibits in the forms and movements of the horses; these animals were indeed more admirably treated by Leonardo than by any other master. The muscular development, the animation of their move-

ments, and their exquisite beauty are rendered with the utmost fidelity."

It is clear that Vasari has only sought to describe single parts of the whole work. Nevertheless, his description has led one to think that Leonardo's composition was confined to this single scene. This view, however, meets with contradiction at the hands of the anonymous biographer, who informs us that, after the death of the master in the hospital of Santa Maria Nuova, "*the greater portion of the cartoon was still in existence, to which belongs also the drawing of the equestrian group, which was completed and remained in the palace.*"

In the present day we do not possess many genuine designs by Leonardo for this picture, although there are numerous sketches by him of horses and riders in various positions, all full of dash and spirit. He was personally such a great lover of horses that, as Vasari somewhere says, "He used to retain his servants and horses, even when he had nothing to live upon." Ludovico Dolce speaks of the masterly way in which he was able to depict horses.* M. Thiers possessed a sketch for this picture, in which the horsemen are shown as skeletons. There are also some little sketches in the print-room of the British Museum, of mounted combatants in various attitudes; they may refer to parts of the painting which are not reproduced in the above-mentioned engravings. There are also in the Royal Library at Windsor two very interesting sketches of horsemen fighting, apparently preparatory studies for the described picture.

Benvenuto Cellini tells us in his autobiography: "Michelangelo's cartoon was hung in the palace of the

* "Stupendissimo in far cavalli." See Aretino, Venice, 1557.

Medici, while Leonardo's was placed in the hall of the Popes, where, as long as they were exhibited, they formed a school in which the world might learn." We have yet to explain that it was really Leonardo who constituted himself the founder of the modern conceptions with regard to the presentment of battle-pieces. Apparently he was of opinion that it is mainly necessary to portray not only the murderous conflict of infuriated human beings, but also the details of picturesque landscape scenery.

Perhaps, when in Northern Italy, Leonardo may have been present at more than one battle-field. In the Windsor collection there is a drawing of a great battle, in which elephants are introduced among the cavalry. Possibly this is meant to represent one of Hannibal's victories over the Romans in Northern Italy. The plain of the landscape forms the chief feature of this sketch, the figures being drawn almost in miniature, so that it needs close scrutiny to distinguish them at all.

One of the few complete chapters in the 'Trattato della Pittura' contains the rules laid down by Leonardo for his pupils as to the composition of battle-pieces—rules which, of course, the master himself had observed when painting the *Battle of Angiari*. His are principles which may yet serve us in the present day; while, owing to the vivid clearness and force of its style, no less than to its poetic tendencies, his written description of the conflict may rank very high among similar efforts in Italian literature. When reading it we should not forget that much contained therein, the battle and bloodshed and human anguish with which we moderns are familiar, was for the men of that day an absolute rupture with all tradition, an innovation of no common kind :

"First, let the air exhibit a confused mixture of smoke, arising from the discharge of artillery and musketry, and the dust raised by the horses of the combatants; and observe, that dust being of an earthy nature, is heavy, but yet, by reason of its minute particles, it is easily impelled upwards, and mixes with the air; nevertheless, it naturally falls downwards again, the most subtle parts of it alone gaining any considerable degree of elevation, and at its utmost height it is so thin and transparent, as to appear nearly of the colour of the air. The smoke, thus mixing with the dusty air, forms a kind of dark cloud, at the top of which it is distinguished from the dust by a bluish cast, the dust retaining more of its natural colour. On that part from which the light proceeds, this mixture of air, smoke, and dust, will appear much brighter than on the opposite sides. The more the combatants are involved in this turbulent mist, the less distinctly they will be seen, and the more confused will they be in their lights and shades. Let the faces of the musketeers, their bodies, and every object near them, be tinged with a reddish hue, even the air or cloud of dust; in short, all that surrounds them. This red tinge you will diminish in proportion to their distance from the primary cause. The group of figures, which appear at a distance between the spectator and the light, will form a dark mass upon a light ground; and their legs will be more undetermined and lost as they appeared nearer to the ground, because there the dust is heavier and thicker.

"If you mean to represent some straggling horses running out of the main body, introduce also some small clouds of dust, as far distant from each other as the legs of the horse, and these little clouds will become fainter, more

scanty, and diffused, in proportion to their distance from the horse. That nearest to his feet will consequently be the most determined, smallest, and the thickest of all.

"Let the air be full of arrows, in all directions, some ascending, some falling down, and some darting straight forwards. The bullets of the musketry, though not seen, will be marked in their course by a train of smoke, which breaks through the general confusion. The figures in the foreground should have their hair covered with dust, as also their eyebrows, and all parts liable to receive it.

"The victorious party will be running forwards, their hair and other light parts flying in the wind, their eyebrows lowered, and the motions of every member properly contrasted; for instance, in moving the right foot forwards, the left arm must be brought forward also. If you make any of them fallen down, mark the place of his fall on the slippery, gore-stained dust, and where the ground is less impregnated with blood, let the print of men's feet and of horses that have passed that way be marked. Let there be some horses dragging the bodies of their riders, and leaving behind them a furrow made by the body thus trailed along.

"The countenances of the vanquished will appear pale and dejected. Their eyebrows raised, and much wrinkled about the forehead and cheeks. The tips of their noses somewhat divided from the nostrils by arched wrinkles terminating at the corner of the eyes, those wrinkles being occasioned by the opening and raising of the nostrils; the upper lips turned up, discovering the teeth. Their mouths wide open, and expressive of violent lamentation. One may be seen fallen wounded on the ground, endeavouring with one hand to support his body, and

covering his eyes with the other, the palm of which is turned towards the enemy. Others running away, and with open mouths seeming to cry aloud. Between the legs of the combatants let the ground be strewed with all sorts of arms, as broken shields, spears, swords, and the like. Many dead bodies should be introduced, some entirely covered with dust, others in part only; let the blood which seems to issue immediately from the wound appear of its natural colour and running in a winding course, till, mixing with the dust, it forms a reddish kind of mud. Some should be in the agonies of death; their teeth shut, their eyes wildly staring, their fists clenched, and their legs in a distorted position. Some may appear disarmed and beaten down by the enemy, still fighting with their fists and teeth, and endeavouring to take a passionate, though unavailing revenge. There may be also a straggling horse without a rider, running in wild disorder; his mane flying in the wind, beating down with his feet all before him, and doing a deal of damage. A wounded soldier may also be seen falling to the ground, and attempting to cover himself with his shield, while an enemy bending over him endeavours to give him the finishing stroke. Several dead bodies should be heaped together under a dead horse. Some of the conquerors, as having ceased fighting, may be wiping their faces from the dirt collected on them by the mixture of dust with the water from their eyes.

“The corps de réserve will be seen advancing gaily, but cautiously, their eyebrows directed forwards, shading their eyes with their hands to observe the motions of the enemy, amidst clouds of dust and smoke, and seeming attentive to the orders of their chief. You may also make

their commander holding up his staff, pushing forwards, and pointing towards the place where they are wanted. A river may likewise be introduced, with horses fording it, dashing the water about between their legs, and in the air, covering all the adjacent ground with water and foam. Not a spot is to be left without some mark of blood and carnage."*

In the year 1504, when at work at the cartoon of the *Battle of Anghiari*, Leonardo da Vinci lost his father, a fact which he records himself in the British Museum manuscript: "On the afternoon of Wednesday, the 9th of July, 1504, at three o'clock, died my father, Ser Piero da Vinci, notary to the palace of the Podesta. He was eighty years old, and left behind him ten male and two female children." He here states his father to have been three years older than he actually was. The same event is alluded to in a similar note in the 'Codice Atlantico' at Milan.

In one of his manuscripts in the South Kensington Museum there is an account headed, "Expenses for the funeral of Caterina."† This was the name of his unfortunate mother, and Leonardo was without doubt the only one of her relations who paid her the last tribute of respect. It is impossible to determine the date of her decease. From the several items of the bill, for instance, from sums paid to four priests and nine other clergymen, we have evidence that the funeral was conducted with much ceremony. Caterina appears to have died in a hospital, where Leonardo used to visit her. In the same note-book in South Kensington we read: "Next to Caterina

* 'A Treatise on Painting,' by Leonardo da Vinci, translated by J. F. Rigaud, R.A., Lond. 1877, pp. 57-60.

† See Appendix, Note 7.

in the hospital lies the young Giovanna, a person of fantastic features." * These two brief notes are the only information which we have respecting his relation to his mother; they are of very great interest to us, and place the artist's personal character in a most favourable light.

It was about the year 1504 that the portrait of Mona Lisa was completed, at present in the Louvre Gallery. In this painting, rather than in any other production of his, we can the easiest discern the master's style. He was at work upon the picture during four whole years. Mona Lisa, the daughter of Antonio Maria di Noldo Gherardini, was a Neapolitan, and third wife of Zanobi del Giocondo (1460-1512), whence it comes that she is also called "la Gioconda." She was married to him in the year 1495. Francis the First paid, a few years later, four thousand gold florins for the portrait, an enormous sum in those days. The picture represents a life-size figure seated in an arm-chair, turning towards the left, with hands crossed in the lap. Only the upper part of the body is visible; the costume is simple in the extreme, with no attempt at adornment. A far-stretching landscape forms the background, painted with the utmost delicacy. The admiration which this portrait has always created is owing not merely to the beauty of the sitter, nor to the charm of the sumptuous costume and magnificent colouring. Herein its chief excellences do not lie; they are primarily those of conception and expression. "There is so pleasing an expression," says Vasari, "and a smile so sweet, that while looking at it one thinks it rather divine than human, and it has ever been esteemed a wonderful work, since life itself could exhibit no other

* "Giovannina, viso fantastico, sta asca chaterina allospedale."



MONA LISA.—“LA BELLE JOCONDE.”
IN THE LOUVRE, PARIS.

appearance." And while the same writer proceeds to show how thoroughly each feature seems accurately to correspond with nature, Lomazzo, with more discrimination, says that whoever has seen the picture, must admit the supremacy of art to nature, "art having a far higher and more subtle method of fettering the interest of the thoughtful."*

As in most of Leonardo's pictures, the shadows have unfortunately become much darkened by the influence of time, and are now even of a somewhat heavy tone, whilst it becomes evident, from Vasari's minute descriptions when compared with the original, that the colouring was originally quite clear and transparent.

When in Florence he also painted the portrait of Ginevra, the wife of Amerigo Benci, a picture which has unfortunately not been preserved.

In the year 1509, Leonardo da Vinci's friend Luca Paciolo published his work, 'De divina Proportionem,' which he dedicated to the gonfaloniere Soderini. It was illustrated by sixty geometrical figures done, as the preface informs us, by "that notable master of perspective, and musician, he who excels in every art, Leonardo da Vinci, of Florence." Leonardo seems to have had some share in the compilation of this work. Perhaps it was also he who designed the beautiful initial letters which adorn its pages.

Among the painter's best friends in Florence was Giovanni Francesco Rustici (1474-1554, about), a young nobleman of the town, of whose life Vasari gives a detailed account, as in leisure times he also exercised the fine arts, especially delighting in painting horses. What little remains to us of his work is therefore of extraordinary interest, Leonardo having apparently

* G. P. Lomazzo, 'Idea del Tempio della Pittura,' Milano, 1591.

acted as his helper and instructor. Above the north door of the baptistry of Florence there is a life-size bronze group by him of John the Baptist preaching, who stands between two listening Pharisees. One of the figures, that of an energetic-looking old man with bald head, is with good reason believed to show that Leonardo had not a little to do with Rustici's work. Vasari tells us that when Rustici was making the clay model for this work, he would have no one about him but Leonardo da Vinci, who actually did not quit his side until the design had been entirely completed. The style in which the figure just mentioned is executed is particularly that of Leonardo.

Among the Florentine artists who even earlier than this had been influenced by Da Vinci, we must specially mention Fra Bartolommeo, who, having completed his term of pupilage with Cosimo Roselli, devoted himself zealously to the study of the master's works.* Jacopo Carrucci da Pontormo (1494-1557) is another painter who was among the pupils who visited Leonardo's studio.† The sculptor Baccio Bandinelli (1493-1560) was employed by him as a worker in relief.‡ For a certain period Ridolfo del Ghirlandajo was a successful imitator of Leonardo's style.§ The anonymous biographer tells us that when Leonardo was at work upon his battle-piece in the Palazzo Vecchio, Ferrando the Spaniard was his pupil, together with Raffaello d'Antonio di Biagio and Riccio da Santa Croce, the latter a painter of whom nothing beyond his

* Vasari, ed. Lemonier, vol. vii. p. 150.

† Vasari, vol. xi. p. 30.

‡ Vasari, vol. x. p. 295.

§ He painted the picture of the *Annunciation*, No. 1288 in the Uffizi at Florence. It has been erroneously ascribed to Leonardo.

name is known.* In one of Leonardo's manuscripts the remark occurs, "1505, on Tuesday evening, the 14th of April, Lorenzo came to stay with me. He told me that his age was seventeen." That this was Lorenzo Lotto is hardly a safe assumption; there is absolutely no grounds for such a belief. In the British Museum manuscript we find a German mentioned as being also a pupil or assistant of Leonardo's, but we know nothing of him beyond just this. Leonardo writes: "Early on Saturday morning, the 3rd of August, 1504, the German Jacopo came to my house to stay. We have settled that I am to pay him one carlino a day." Elsewhere on the MS. there are entries in the same handwriting of the names of other pupils, which figure in one of the artist's household accounts. We must not omit to quote these hitherto unpublished memoranda just as Leonardo set them down: they speak to us of the domestic life of the master and his pupils.

"August 14th, twopence to Tommaso; on the 18th of the same month, fourpence to Salai; on the 8th of September, sixpence to Il Fattore . . . on the Sunday, the 16th of September, I gave fourpence to Tommaso . . ." Respecting this Tommaso we have no information at all. Il Fattore is the sobriquet of Giovanni Francesco Penni, who was born at Florence in 1486, and who is known to have been one of Raphael's earliest pupils.

In the summer of 1506 Leonardo received permission from the Signory of Florence to visit Milan. When after this he from time to time returned to Florence, his stay there was always a brief one; that he did this was mainly owing to matters of a purely domestic and personal nature, which have no bearing whatever upon the history of art.

* 'Archivio storico Italiano,' serie terza, tomo xvi., pp. 219-30.



CHAPTER VI.

IN FRENCH SERVICE—VISIT TO ROME—IN THE SERVICE OF
FRANCIS I.—THE MADONNAS IN THE LOUVRE AND AT
CHARLTON PARK — RESIDENCE AT CLOUX — LEONARDO'S
DEATH.

LEONARDO, soon after his return to Milan, lived with his friend Melzi, and in the summer of 1506 he entered the service of the French government. This we gather from the following excerpts taken from a letter addressed by Charles d'Amboise, the French governor of Milan, to the Signory of Florence. "We shall still need Messer Leonardo's help in the completion of a work. * * * * We therefore beg for an extension of the leave granted to the aforesaid Leonardo, in order that he may stay somewhat longer in Milan." His relations with Louis the Twelfth very soon recommenced. This we infer from a letter of Francesco Pandolfini's, the Florentine ambassador at the French court.* It is dated Blois, January 22, 1507. "Finding myself this morning in the presence of the most Christian King, his Majesty called me and said: 'Your lords must render me a service. Write

* Gaye, 'Carteggio,' vol. ii. p. 59.

to them that I desire to make use of their painter, Master Leonardo, who is now at Milan, and that I wish him to do certain things for me. Do this in such a way that their lordships enjoin him to serve me promptly, and tell him not to depart from Milan before my arrival. He is a good master, and I desire certain things by his hand. Write to Florence at once, and in such a way as to obtain the desired result, and send me the letter.' All this," adds Pandolfini, "came from a little painting by his hand that has recently been brought here, and which is judged to be a very excellent work. In the course of conversation I asked his Majesty what works he desired from him, and he answered, 'Certain small pictures of Our Lady and others, according as the idea occurs to me: perhaps I shall get him to paint my portrait.'" We may assume that Pandolfini here alludes to the picture of the *Madonna with the Spindle*, painted by Leonardo for Robertet, the king's chancellor.

King Louis seems to have taken a very deep interest in the artist. This is how he speaks of him in his letter to the Signory of Florence, dated from Milan, on July 26, 1507: "Dearest and most noble friends, We have been informed that Leonardo da Vinci, our dearly and well-beloved painter and court engineer, has a lawsuit still pending at Florence between himself and his brothers respecting an inheritance, &c.—Louis, by the grace of God, King of France, Duke of Milan, and Lord of Genoa."* It gives one no very encouraging insight into the existing state of Florentine legislation to know that Leonardo, although conscious of the justice of his cause, found it necessary also to beg Ippolito d'Este,

* G. Uzielli, 'Ricerche,' Firenze, 1872, p. 184.

the Cardinal of Ferrara, to bring his influence to bear upon the Signory, at whose hands "he might not only obtain justice but also a verdict in his favour."

After twice visiting Florence during the year 1507 in October we find him again at Milan. From the short note in one of his manuscripts, "Bought at Milan on the 12th of October, 1508," we can see that he was in that city in the autumn of that year, where, to judge from a similar cursory remark which occurs elsewhere, he also spent part of the following spring.* Just then Milan was the scene of great festivities and rejoicings in honour of Louis the Twelfth's recent victories over the Venetians at Agnadello, and in these Leonardo probably took part.

But in one of the British Museum manuscripts we read as follows: "Begun in Florence, in the house of Piero di Barto Martelli, on the 22nd of March, 1508 (= 1509)." At the beginning of the year 1511 he addressed the following letter to Charles d'Amboise, the French governor at Milan: "Working as I have done for his most Christian Majesty the King, it would greatly please me to know whether I am to continue to receive my salary or not. To the many letters which I have sent your Excellency respecting this, I have never yet received an answer. I now send Salai, who will inform you that the lawsuit with my brothers is nearly at an end. I hope to arrive there this Easter, and I shall bring with me two pictures of the Madonna, of different sizes. These are for his most Christian Majesty, or for any one else on whom your Excellency may see fit to bestow them. On my return I should be very glad to know where I am to take up my residence, as I would no longer wish

* "Naviglio di San Cristoforo di Milano fatto adi 3 di Marzo, 1509."

to be a burden to your Excellency." In 1508 and 1509 he was still in receipt of a royal stipend, as he himself tells us in the 'Codex Atlanticus.' *

Leonardo writes a similar letter to the inspector of waterworks, saying that he intended to return at Easter and that he would bring two pictures of the Madonna which he had begun, and at which he had worked a good deal in his spare time, so that they were in a state of forward completion. There is no evidence to show that both or even one of these paintings became the property of Louis the Twelfth. Nor can we identify them with the two undoubtedly genuine Madonnas by Leonardo in the Louvre, of which we shall have presently to speak. If the French Marshal ever got Leonardo's letter, he at any rate was then in no position to interest himself about works of art. Since the October of 1510 he had been at war with Pope Julius the Second, before the walls of Bologna. He died at Correggio in the following February, wholly crushed beneath the signal failure of his strategy. In the December of 1511, Leonardo was again at Milan. There is evidence of this in the Windsor manuscripts, where are two drawings representing large conflagrations; and to these a special note is appended, which expressly states that the Swiss had lit these fires when in Milan.†

In the December of the following year Maximilian Sforza, Lodovico's son, made his entry into Milan, although the French troops still occupied the citadel.

* Fol. 189: "Richordo de dinari che io ho auoto dal re per mia provisione dalluglo 1508, insino aprile prossimo 1509, prima scudi 100, poi 200, poi 70 e poi 50 e poi 20 e poi 200 franchi a 48 per luno."

† See Appendix, Note 8.

He had been enthroned by representatives of the "Holy League"; the duchy, however, was comparatively a small one now, and the youthful Sforza was only able to govern it for the space of three years.

In 1513, a Florentine of the house of Medici had been elected pope at Rome under the title of Leo the Tenth. He was Lorenzo Il Magnifico's son, Giovanni Medici, who at that time was only thirty-seven years old. Both Raphael and Michelangelo had by then become famous, owing to their labours in the Vatican; whereas the years had gone by and Leonardo da Vinci, a veteran of sixty, had as yet only once set foot in Rome, the rallying-point of all artists of note, the very Athens of the Renaissance. Vasari relates that, on the occasion of the exaltation of Pope Leo the Tenth to the chair of St. Peter, the Duke Giuliano de' Medici took Leonardo with him as his companion to Rome. Giuliano was Leo's youngest brother, being his junior by some three years, a man gentle and melancholy in disposition. It was the Pope's intention to give him an important dukedom in Central Italy. In the February of 1515 he was betrothed to the Princess Filiberta, sister of King Francis I.'s mother, Louisa. The reason given by Vasari for Leonardo's visit to Rome is not the true one. His statement is contradicted by a note in one of the master's own manuscripts. "I left Milan on the 24th of September (1514), for Rome, accompanied by Giovanni,* Francesco Melzi, Salai, Lorenzo, and Il Fanfoia." This apparently points to a formal migration of the artists resident in Milan, who at that time must have found life in that city and in Lombardy well-nigh unendurable. All existing accounts seem to agree as

* Giovanni Antonio Beltraffio (?).

to the terribly disordered and unsettled state of affairs which prevailed there upon the collapse of the French monarchy. On the 27th of September, Leonardo was at Sant' Angelo, on the Po, where he had sufficient to occupy him. Elsewhere in his manuscripts we read the following passage, certainly written at Rome: "At daybreak on the 9th of January, 1515, Giuliano de' Medici il Magnifico left Rome for Florence, where his marriage was to take place, and on the same day the King of France died." Two benefactors lost to him in one day—this is doubtless the poignant meaning contained in this curt sentence. The aged monarch died, by the way, on the 1st of January, yet the news may not have reached Rome until the 9th. Although the Pope did not hesitate to give every honour to art and to artists, Leonardo was yet not sufficiently fortunate in his professional engagements to allow of his making Rome the theatre of his best achievements in the domain of art. On the other hand, the splendid talents he displayed in the science of physics and of chemistry, aroused the interest of the Pope, who himself took an interest in alchemy. Vasari narrates in detail how "Leonardo da Vinci, having composed a kind of paste from wax, made of this, while it was still in its half-liquid state, certain figures of animals, entirely hollow and exceedingly slight in texture, which he then filled with air. When he blew into these figures he could make them fly through the air, but when the air within them had escaped from them they fell to the earth. On another occasion he attached to a live lizard, wings, made from the skins of other lizards, flayed for the purpose. Into these wings he put quicksilver, so that when the animal walked, the wings moved also, with a

tremulous motion. He then made eyes, horns, and a beard for the creature, which he tamed and kept in a cage; he would then show it to the friends who came to visit him; and all who saw it ran away terrified." According to Vasari; this was but one of the many equally extraordinary experiments in which he delighted. He also occupied himself a great deal with mirrors and optical instruments of all kinds, besides inventing new sorts of oils for painting, and varnishes to preserve works when executed. The Pope is said to have given him a commission for a picture, but when he was told, probably by some envious busybody, that the artist, instead of making a design, was engaged in preparing a solution of distilled oils and herbs as a varnish for it, he exclaimed: "This man, alas! will assuredly do nothing at all, since his thoughts are of the end before he has even made a beginning." Nothing is more likely than that intrigues were the reason that the artist received no commission for larger and more important works. We only know of two small pictures which he is supposed to have painted when at Rome, at the request of Messer Baldassare Turini, of Pescia, the Pope's datary. The first of these is a little child, "of marvellous grace and beauty," and the other a *Madonna and Child*, which, even when Vasari saw it, was already in a "greatly deteriorated" state.

There is a picture still in good preservation which has been falsely supposed to be from Leonardo's brush. It is a fresco in the lunette of a corridor in the convent of S. Onofrio near the Vatican, representing a *Madonna and Child* in the act of blessing a donor. This may have been done by Beltraffio, who probably went with Leonardo to Rome. In December 1515 the painter was again in

Milan. It is supposed that the reason of his return was due to some disagreement with Michelangelo, the two artists having at that time been in competition for the elevation of the façade of San Lorenzo in Florence. This was the last time that Leonardo was to see Milan, which for him had been, as it were, a second home. Soon afterwards he entered upon his duties in the employ of the French king. Perhaps it was during this last visit to Milan that some of his panel pictures were painted, which fortunately for us are uninjured by time. Lomazzo tells us that in his days there was "a panel-picture in the Capella della Concezione in Milan, done by Leonardo da Vinci, in which St. John the Baptist is shown kneeling with folded hands before the Saviour, whereby is expressed childlike awe and obedience, while the Madonna in wonder [*allegre speculazione*] regards him, her countenance full of mingled joy and expectancy. While with face of radiant beauty the seraph seems wrapt in the contemplation of that boundless bliss which shall go forth to mankind as the outcome of the mystery on which he now looks, the features of the Infant Christ are distinctly stamped with an expression of Godlike wisdom. The Virgin kneels, holding St. John with her right hand, while she stretches the left forward, which is thus seen foreshortened. The angel holds the Holy Infant by the left hand, who, sitting upright, gazes earnestly at St. John while bestowing blessing upon him."* Of this picture also Lutuada makes mention in his 'Descrizione di Milano.' † It was purchased at Milan, in 1796, by Gavin Hamilton, who afterwards sold it to Lord Suffolk,

* 'Trattato dell' Arte della Pittura,' p. 171.

† Vol. iv. pp. 245-246.

in whose collection at Charlton Park the work is at present to be seen. A replica of it, differing somewhat in the details of the landscape and in the drawing of the angel, is now in the Louvre, doubtless an original of the master's, although its history is less known. The painting in the Louvre, known from the landscape background as *La Vierge aux Rochers*, is first mentioned as among the works of art belonging to Francis the First. Designs for it are to be found at Turin and at Windsor, in which the angel is shown with outstretched hand, a detail which only occurs in the picture at Paris.

The second authentic *Madonna* by Leonardo in the Louvre is *La Sainte Anne* : the Virgin is seated in her mother's lap, and bending downwards to the Holy Child, who is fondling a lamb. The composition of the work is wholly different from the cartoon in the Royal Academy ; the drawing shows greater freedom, although in colouring it has not the vivid transparency of the *Vierge aux Rochers*. For whereas in this picture each flower in the foreground is given with such exquisite truth that to classify it botanically is an easy matter, in the *Sainte Anne* but few details are indicated, and altogether the work is evidently in an unfinished state. A whole set of studies for this painting is to be seen in the Windsor collection, also sketches for the head and drapery of St. Anne, besides several studies for the figures of the Virgin and the Holy Infant. The only allusions to this picture in the literature of the sixteenth century occur in a sonnet by Girolamo Casio de Medici, entitled 'Per S. Anna che dipinge L. Vinci, che tenea la Maria in braccio, che non volea il figlio scendessi sopra un agnello,' and in Giovio's biography of the artist. The historian writes thus : " A panel-picture



THE MADONNA, WITH THE ROCKS.

IN THE LOUVRE, PARIS.



of the Infant Christ at play, with his mother the Virgin, and his grandmother Anna, was purchased by Francis the First, who caused it to be hung in his *sacratio*." Giovio thinks so highly of the work that he classes it with the *Last Supper* and the *Battle of Anghiari*, the only other pictures



LA SAINTE ANNE.

which he mentions. However, there is no existing record of it among the inventories of the French monarch. From France, together with the cartoon in the Royal Academy, it may have found its way back to Italy, for in 1629 it was purchased in Lombardy by Cardinal Richelieu. Of greater importance, however, than its mere history,

is the question as to when the painting was first produced. Some have thought that it was executed in France during the closing years of the painter's life. But the fact remains that the original was frequently copied by Milanese artists, mostly contemporaries of Leonardo. The carefully executed and accurate copies in the galleries at Munich, Florence, Milan, as also Luini's reproduction in his *Madonna* now at Lugano are sufficient proof of how early the picture had gained a high recognition, notwithstanding the silence of Vasari and Lomazzo. It remains doubtful if either or both of these pictures now at Paris are identical with those which the artist mentions in his last letter to the Maréchal de Chaumont.

There is another genuine work by Leonardo, the *Figure of John the Baptist*, now in the Louvre, mentioned as having been in the collection of King Francis. St. John's figure is half life-sized, with head looking to the left. In his right hand is a cross made of reeds, to which he points with the left. Although doubtless an original, the picture in its present state has no great charm for us. Owing to time, the colouring has become unpleasantly dark in tone, and in some places the work shows signs of having been painted over; yet the face is modelled with a delicacy and refinement thoroughly worthy of the great artist. Pupils have repeatedly copied the picture, making use of separate motives therefrom for similar productions; seldom, however, with success. Nevertheless the greater part of these has been indiscriminately classed among the genuine works of the master.

No sooner had the young King Francis the First succeeded to the throne of France than, at the request of the

Venetian Republic, he entered upon a war with the Papal confederacy. His victory at Marignano on the 5th October 1515 forced Maximilian Sforza, who held the fortress of Milan, to capitulate, and throw himself upon the mercy of the king. Leonardo had probably met the latter before that time at Pavia, whom he accompanied to Bologna, where his Majesty entered into negotiations with Pope Leo, from the 8th of December until the 15th, returning to France through Milan. With the beginning of the year 1516 Leonardo is said to have received a yearly stipend from the king of seven hundred scudi. Francesco Melzi was among those who accompanied the veteran master, who also took his servants Maturina and Battista de Vilanis with him. The Château Cloux, near Amboise, was the residence chosen for "Monsieur Lyonard." During the few years that he lived there he was in a feeble state of health, and consequently could make but few contributions to art.

Vasari relates that the king gave him a commission for a picture to be executed from the cartoon of St. Anne, at present in the Royal Academy. This has given rise to the false belief that the Louvre picture was painted in France, although Vasari distinctly says that it was by words only and not by deeds that the artist then sought to pacify the monarch. We are indebted to Lomazzo for information respecting two pictures which were undoubtedly produced during Leonardo's stay in France; a *Leda* and a *Pomona*, both of which have unfortunately perished. Of the first of these, he gives a fuller description: "*Leda* is shown completely undraped, the swan resting upon her knees, while her downcast eyes testify to her shame. The picture is among those

which were never wholly finished." * In the Print Room of the British Museum there is a genuine pen-and-ink sketch by Leonardo, of a nude *Leda and the Swan*, a study, perhaps, for the lost picture. Of the *Pomona* we only know that she was represented "with laughing face, wearing a triple veil." † Without Vertumnus a *Pomona* cannot well be conceived. ‡ Among the rare works of Francesco Melzi, there is an excellent representation of this mythical scene in the painting in the Berlin Gallery (No. 222), the figures in which are life-size. The head of *Pomona* is painted with especial charm, and in the other parts of the picture Leonardo's influence is clearly discernible.

On the 23rd of April, 1519, Leonardo made his will. In it he commends his soul to "Nostro Signore Messer Domine Dio, alla gloriosa Virgine Maria, a monsignore Sancto Michele, e a tutti li beati Angeli sancti e Sancte del Paradiso." In accordance with his wish, he was interred in the Church of San Florentino, in Amboise. He also gave directions for the performance of masses to be said after his death, which occurred on the 2nd of May in the same year, in the sixty-seventh year of his age.

As regards the touching story so often represented by modern artists, of the visit of King Francis to the painter's death-bed, who expires in the arms of his patron, although it passed for true in the time of Francesco d' Ollanda § and Vasari, we may now safely reject it as a

* 'Trattato dell' Arte della Pittura,' p. 164. 'Idea del Tempio della Pittura,' chap. ii.

† 'Idea,' p. 132.

‡ Ovid, 'Metamorph.' lib. xiv. vers. 623, seq.

§ See Appendix, Note 9.

myth. For when Leonardo's death took place at Cloux, Francis the First, with his Court, was far distant at St. Germain en Laye, and we have the evidence of the personal diaries of the king to prove that at the time of the event he had not quitted that place. In Oltrecchi's *Groteschi* there is a verse which refers to the painter's decease; his account of the king's behaviour may well be considered the true one. "Sore wept king Francis when he heard from Melzi that Da Vinci was dead, who, when living in Milan, painted the *Last Supper*, a picture which excels every other." On the 1st of June, Melzi, writing from Amboise, informed Giuliano da Vinci of his brother's death. We can see from the grief expressed in his letter, how close had been the friendship between the master and himself. "He was to me the best of fathers, and it is impossible for me to express the grief that his death has caused me. Until the day when my body is laid under the ground, I shall experience perpetual sorrow, and not without reason, for he daily shewed me the most devoted and warmest affection. His loss is a grief to every one, for it is not in the power of nature to reproduce another such a man."

The anonymous biographer tells us of the disposition of Leonardo's property in the following words: "To Melzi he left his papers, to Salai and his servant, Battista de Vilani, his garden near Milan, and to his brothers the sum of four hundred ducats deposited at Santa Maria Nuova in Florence."

Diligent researches have of late years been made by M. Arsène Houssaye, respecting the painter's place of burial, yet they have led to no satisfactory result. At the time of Leonardo, France was far behind Italy in culture and

in the fine arts. Leonardo's life in France must have been little short of exile, surrounded by people who could neither understand nor appreciate him; and thus both he and his grave fell rapidly into oblivion. Nor if we examine the work produced in the French school of painting can we feel surprise that it should have remained utterly uninfluenced by the spirit of the great Florentine. At that time it could have but little in common with a genius such as his.

In the archives of the Royal Chapel at Amboise, Leonardo's burial is thus recorded: "Fut inhumé dans le cloistre de cette église M^r Lionard de Vincy, nosble millanais, 1^{er} peintre et ingénieur et architecte du Roy, meschansnischien d'estat et anchien directeur de peinture du duc de Milan. Ce fut faict le dov^e jour d'aoust, 1519." *

* H. Herluisson, 'Actes d'État civil d'Artistes français,' Orléans, 1873, p. 453.





CHAPTER VII.

LEONARDO'S PERSONAL APPEARANCE—HIS PRINCIPLES IN ART—
CARICATURES—THE 'TRATTATO DELLA PITTURA'—HIS
MANUSCRIPTS—ACHIEVEMENTS IN SCIENCE—LEONARDO'S
LIBRARY—THE PHILOSOPHER AND THE POET.

THE only authentic portrait of Leonardo da Vinci which we possess, is a drawing done in red chalk by the master himself. It is now in the Royal Academy at Turin.* The forehead is broad and smooth, and with long flowing white hair and beard, the nose strongly marked, the mouth delicately pencilled, yet full of determination, with penetrating eyes hidden beneath straight bushy brows. The picture was doubtless executed during the last years of the artist's life, and when we compare the features in their decided outline with other presumably genuine portraits and sketches, the difference between them is so striking, as to admit of only one conclusion. There is not a single portrait extant of the painter when a young man, not even a spurious one. Yet all his contemporaries have expressed their great admiration of his singular personal beauty.

* See Frontispiece.

The anonymous biographer says: "His figure was beautifully proportioned, and he had a noble and engaging presence. He usually wore a rose-coloured coat reaching to the knee, and long hose, as was the fashion at that time. His carefully combed hair fell in luxuriant curls as far as his waist." In Giovio's biography we read: "He was of an extremely kind and generous disposition, of most striking appearance, with fine features. He was possessed of much taste, and had also a special talent for entertaining, which he notably displayed in the conduct of theatrical performances. He also sang well to the lute, and was specially welcomed as a companion of princes."

Among the greatest masters of the Florentine Renaissance, stands Leonardo da Vinci, side by side with Michelangelo and Raphael. As the earliest, so too was he the real initiator of the highest phase of the Renaissance. In the public eye he may not take equal rank with these artists, owing to the cruelty of fortune, which has robbed us of just his best and most beautiful work. To confront him with these painters, however, is to do him a manifest injustice; to institute a parallel between their works and his is no less unfair. Leonardo da Vinci certainly stands alone in the history of art, as one who both conceived and realized ideals which were wholly independent from the antique. In all his numerous papers and writings, he never quotes the antique as a means of instruction for the artist. Singularly enough he only once mentions the "Græci et Romani," and then merely as masters of the treatment of flowing drapery. Leonardo was the first who ventured to base all art instruction exclusively and entirely

upon the study of nature, and it is not too much to say that in his genius the aims of his numerous predecessors culminate, making art no longer dependent upon tradition, but more upon the immediate study of Nature herself. Unlike those ideals which contemporary artists chose to set before them, he imparts to the figures in his canvas a grace and a sensibility at once strange and unaccountable. None of his paintings awe one in the sense that do the powerful creations of Michelangelo, which as it were enthrall the soul. The charm of Leonardo's pictures is reserved for those only, who by deeper examination are enabled wholly to discern and appreciate those subtle and hidden meanings with which his works are charged. Leonardo da Vinci's name has been and ever will be a popular one; the art of Leonardo can never be that: it is too lofty, too sublime.

From the few genuine works by him which we still possess, it is impossible to form an adequate conception of his many-sided genius, nor, in the countless productions of his scholars, shall we find an even partial recompense.

He gives us an accurate idea of his artistic principles and intentions in his drawings and manuscripts; but of these very little has ever been reproduced. The writings of the painter Lomazzo are in many ways a contribution to our knowledge of Leonardo's art. Among them are found the following passages on the master's method of painting. "Leonardo's colouring is subordinate to a grand style of drawing, of which he is an absolute master, and his representation of the human form, whether of child or of full-grown man, are alike distinguished by noble inspiration [*nobil furia*]. In the technical

management of his pictures he carefully intensifies and renders transparent the light and shade by successive glazings, "*con veli sopra veli*."* In the treatment of light, he appears ever anxious to avoid making it too vivid, employing it sparingly here and there, at the same time putting in his shadows in the very deepest tones of colour. By these means he arrives at a balance of light and shade."† The Portuguese artist Francesco d'Ollanda, who for about nine years had studied in Italy, is of a like opinion. In his treatise on painting, written in 1549, he says, "Leonardo da Vinci was the first who boldly painted shadow."‡ Lomazzo further remarks that Leonardo used to say that "the success of a painting depends not only on the observance of the laws of perspective and foreshortening, but also on the effects of light and shade."§

Lomazzo twice refers to the many grotesque heads which he was in the habit of drawing. "Leonardo took special delight in drawing likenesses of clumsy and deformed old people, with a smile upon their face. Aurelio Lovino had a sketch-book of the master's, containing about fifty such studies."|| Persons who were on intimate terms with the artist were wont to tell Lomazzo how Leonardo once intended to make a picture of a company of laughing peasants. "He did not intend to reproduce it on canvas; it was simply a drawing, for which he chose certain persons whose faces seemed to him to be the most suitable. When

* 'Idea del Tempio della Pittura,' ch. xiii.

† 'Idea,' ch. xv.

‡ See A. Raczyński, 'Les Arts en Portugal,' Paris, 1846, p. 54.

§ 'Idea,' ch. xvi.

|| 'Trattato dell' Arte della Pittura,' p. 360.

by the help of friends he was able to meet with these, he invited them all to supper, and sitting down at the table he commenced relating the maddest and most ridiculous stories in the world, so that they all nearly split themselves with laughing. While doing this, he carefully noted their several peculiarities of mien and gesture, all which he kept in his memory. When the peasants were gone, he repaired to his studio and made a drawing of them all, so exactly like, that whoever saw it, found it just as ludicrous as were his side-splitting stories." It was also told to Lomazzo that Leonardo was fond of attending executions, in order to study the facial contortions of criminals when in their death-throes, and to watch the contraction of their eyebrows and the wrinkles in their foreheads.* Leonardo's sketches of grotesque figures have been copied times out of number; this shows that at one time they were very popular. Yet they are not caricatures as we understand the word; for in them there is no intention to ridicule the character of well-known persons or of certain classes of people. Leonardo apparently drew these sketches of bizarre heads for quite another reason; they were to help him in his own studies. His interest in these quaint disfigurements was chiefly anatomical; and as an artist who sought to grasp and define the beautiful in its sublimest point, he thought it no less necessary to gain a knowledge of the anatomy of the hideous. The human forms, such as he shows them, have indeed such refinement, such exquisite spirituality, that there is but little needed in order to produce an exactly contrary effect; in short, it is but the proverbial step between the sublime and the

* 'Trattato dell' Arte della Pittura,' p. 164.

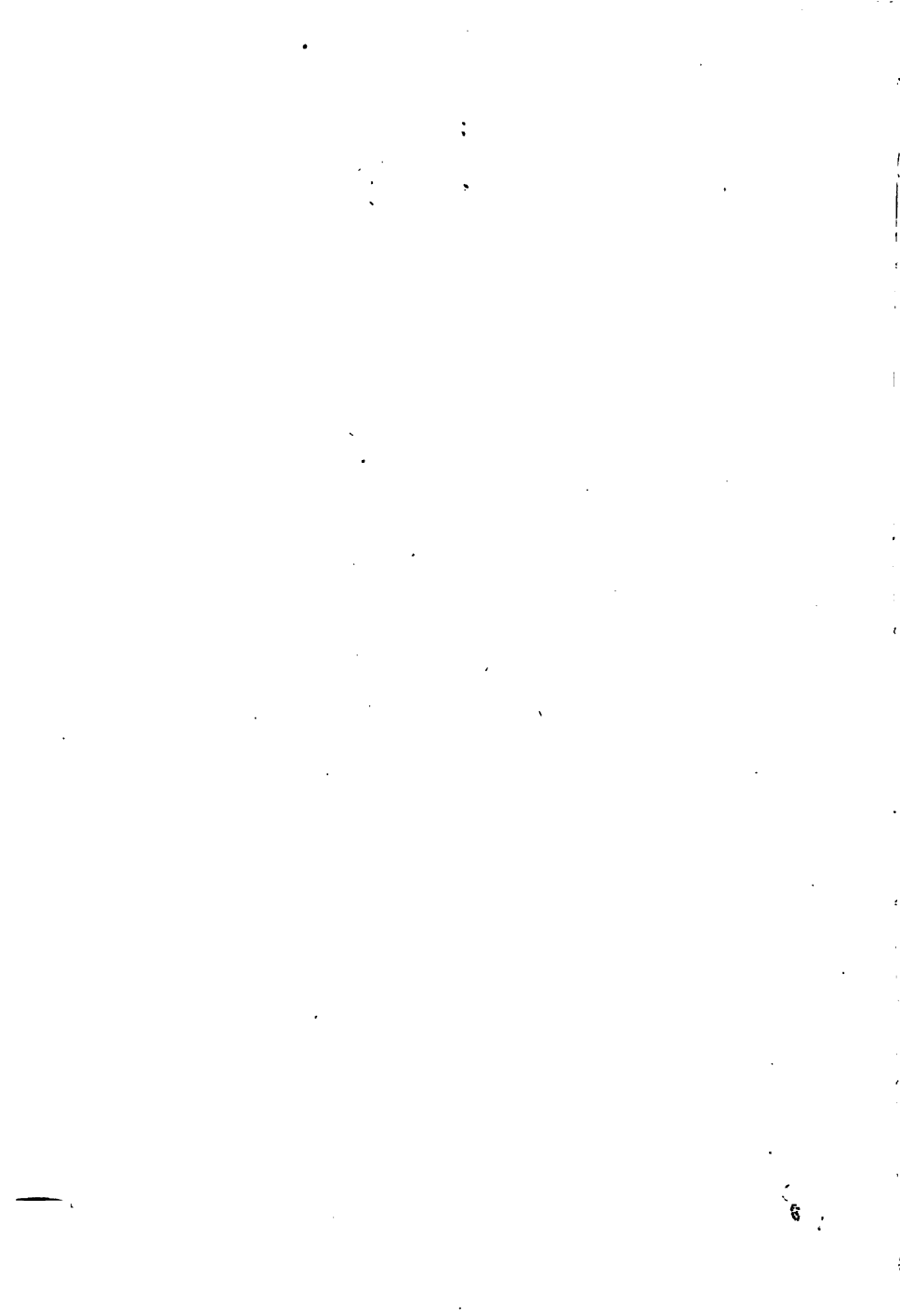
ridiculous. And we may well believe that where the artist was always employed in depicting figures of such perfect purity and holiness, he must have felt the need of some reaction, some change which would take him completely into another world.

No artist perhaps has ever studied anatomy so deeply as did Leonardo. Hitherto it has been thought that all these researches were only of interest to him in their purely scientific character, as they are not included in the current editions of his 'Trattato della Pittura.' Yet on an examination of the manuscripts which have reference to these questions, we shall arrive at quite another conclusion.* All that he says on the subject of osteology and the movement of muscles possesses no less value for the student of medicine than for the student of art. The accuracy of his anatomical drawings have perhaps never been equalled. To each of these drawings are marginal notes appended of an explanatory nature, as for instance, on the one of the muscles of the foot we read: "Those muscles of the calf below the knee which are only employed in raising the foot are marked *m*, *n*; and those muscles which are used in moving the foot sideways are marked *u*." These are questions of great importance also for artists in the present day. The following rough notes, written upon the back of some sketch showing various skulls in sections, will prove to us how narrowly Leonardo studied facial anatomy; they also testify to his thorough knowledge of the general grounds and principles of physiology. "What muscle is that which causes one eye to move

* Most of the MSS. in question are in the Royal Collection at Windsor.



HEAD OF A CHILD.
From a Drawing in the Louvre. By Leonardo.



in such a manner that the other is obliged to move also? What muscle causes the eyelids to close or to open or to droop?" &c. The heading "Anatomia" is an ever-recurring one. Researches respecting this subject form one portion of a work, the special title of which has hitherto remained unknown; happily for us, however, it has been preserved among the Windsor manuscripts. In it we read, "on April 2nd, 1489, [I began] the book entitled 'Of the Human Figure.'" Elsewhere occurs the interesting remark, "O that it may please God to let me also expound the psychology and the habits of man in such fashion as I am describing his body."*

According to Luca Paciolo,† in the year 1498, Leonardo had "already completed his valuable work on painting and on the movements of the human body." The 'Trattato della Pittura' has survived in two editions; one is in an abridged form of only three hundred and sixty-five chapters; the other, a detailed one, is comprised in nine hundred and twelve chapters. Our knowledge of the latter is owing to Manzi's discovery in 1817 of a transcript of the original in the Vatican library.‡ The earliest edition of the book in its abbreviated form was issued in France; but not until one hundred and thirty years after the author's death.§ The drawings for this were supplied by Nicolas Poussin.

Benvenuto Cellini, Annibale Carracci and Guido Reni were the first artists not of the Milan School who were

* See Appendix, Note 10.

† In a letter to the Duke Lodovico, dated February 9, 1498.

‡ Guglielmo Manzi, 'Trattato della Pittura di Lionardo da Vinci,' Rome, 1817. This edition is very scarce.

§ 'Trattato della Pittura di Lionardo da Vinci. In Parigi, appresso Giacomo Langlois, MDCLL.'

acquainted with the great master's writings, and which met with their warmest praise. Nor is there any doubt that the 'Trattato della Pittura' is also a means of very useful instruction for the artists of to-day. In 1853 the well-known French painters Ingres, Delacroix, Flandrin, Jouffroy and Meissonier expressed the following opinion as to the method of teaching drawing in the French *Lycées*. "The first thing to be done is to fall back upon the authority of the old masters, whose doctrines as to the theory and practice of art, and the way in which it should be taught, have held good up to the present time. Specially is this so in the case of Leonardo da Vinci." Of the opening chapter on Perspective, headed "What the young Artist in Painting ought in the first place to learn,"* it may not be thought irrelevant to remark that this same chapter exercised so profound an influence upon Alma Tadema when still a young student in Holland,† that he at once adopted the principles advocated therein; and to these he has hitherto consistently kept. Indeed, the effect produced by this artist's pictures is in a great measure due to his adherence to the maxims so firmly laid down by Leonardo.

According to the Vatican manuscript, the 'Trattato' is divided into eight books, being each headed as under :

1. The Nature of Painting, Poetry, Music, and Sculpture.
2. Precepts for the Painter.
3. Of Positions and Movements of the Human Figure.

* See p. 116.

† There exists an old Dutch translation of Leonardo's 'Trattato,' published at Amsterdam in 1582.

4. Of Drapery.
5. Light and Shade and Perspective.
6. Of Trees and Foliage.
7. Of Clouds.
8. Of the Horizon.

The highly interesting contents of the first book, which has not yet been translated from the original, treat of questions of a more general nature. Leonardo seeks here to explain the advantages of the art of painting in comparison to the "sister arts."

Among others, Leonardo makes the following thoughtful remarks: * "To paint with words is the province of poesy, and in this she differs from painting; but in the presentment of events painting bears the palm; there is the same difference between them as between deeds and words; with deeds, the eye has to do, with words, the ear: the difference is the same as that which exists between the relative and objective faculties. For this reason I place painting higher than poesy. The claims of the former have, alas! for long past met with no due recognition, owing to those painters who lacked the eloquence to uphold them. Painting has no need of words; her appeal to humanity is a direct one, only to be realised in an objective manner; whereas poesy finds in language a resource whereby she can equally sound her own praises."

Leonardo places the sense of sight in the foremost rank, because it receives its impressions direct, the cause and place of action being apparent. Thus sculpture and painting, having the nearest approach to reality, should,

* They are omitted in Manzi's edition of the Vatican MS. See Jordan, 'Das Malerbuch Leonardo da Vinci's,' Leipzig, 1873, p. 61.

as he argues, take higher rank among the fine arts than does music, which appeals to a lower sense, the effect being only a transient one, although, in essence, she may be acknowledged as the "younger sister of painting," whose harmonious proportions are no less hers. Below music stands poesy, being a mere verbal reflex of the words and deeds of man, with power only to speak of the actual, the real.

For having set sculpture lower in the scale than painting, Leonardo gives the following reasons, the outcome of his experiences in both these branches of art.

Firstly, the inferiority of sculpture is owing to its utter dependence upon the effects to be gained from light, we being only able to judge justly of it when placed in a certain position; whereas painting has in itself both light and shade.

Secondly, with the materials at its command, sculpture is similarly unable to give a faithful likeness of those natural objects which it seeks to produce; painting, again, is enabled to do this by means of colour. We may note here, in passing, that Leonardo was no friend of polychromatic decoration.*

Thirdly, although sculpture claims to having greater durability, this seeming advantage, at most a material one, painting can acquire at will, by making use of substances equally imperishable, such as stone, copper, and the like.

Fourthly, the impossibility to change or alter a work

* Somewhere in the 'Trattato' Leonardo praises the works of Della Robbia (Luca della Robbia died in 1482), but we must not forget that the early works of the terra-cotta sculpture are enamelled only in white and blue, the white serving for the figures, the blue for the background.

when once finished, a common vaunt with sculptors, is in reality no advantage at all, but the reverse; painting, again, affords endless means towards reaching the highest perfection.

Leonardo's original manuscript of the 'Trattato' has unfortunately not yet been discovered, although we shall find the materials of it in the other numerous writings of the master. We quote some of the more important chapters of the abridged edition of the 'Trattato.' It begins:*

What the young Student in Painting ought in the first place to learn.

"The young student should, in the first place, acquire a knowledge of perspective, to enable him to give to every object its proper dimensions; after which, it is requisite that he be under the care of an able master, to accustom him by degrees to a good style of drawing the parts. Next, he must study Nature, in order to confirm and fix in his mind the reason of those precepts which he has learnt. He must also bestow some time in viewing the works of various old masters, to form his eye and judgment, in order that he may be able to put into practice all that he has been taught."

The following are among the most interesting of those

* See 'A Treatise on Painting' by L. da Vinci, translated from the Italian by John Francis Rigaud, R.A., London, 1877 (George Bell & Sons). A MS. of the 'Trattato' which is preserved in the Penelli Library bears the title "Discorso sopra il disegno di Leonardo Vinci.—Parte seconda." The genuineness of the copies of the first part discovered and published by Manzi is thus confirmed. The Vatican Codex dates only from the middle of the seventeenth century, but we may hope that a better and more complete text will yet be discovered.

chapters which treat of questions of a more general nature.

Rule for a young Student in Painting.

“The organ of sight is one of the quickest, and takes in at a single glance an infinite variety of forms, notwithstanding which, it cannot perfectly comprehend more than one object at a time. . . . A young man, who has a natural inclination to the study of this art, I would advise to act thus: in order to acquire a true notion of the form of things, he must begin by studying the parts which compose them, and not pass to a second, till he has well stored his memory, and sufficiently practised in the first; otherwise he loses his time, and will most certainly protract his studies; and let him remember to acquire accuracy before he attempts quickness.”

How to discover a young Man's Disposition for Painting.

“Many are very desirous of learning to draw, and are very good at it, who are, notwithstanding, void of a proper disposition for it. This may be known by their want of perseverance, like boys who draw everything in a hurry, never finishing or shadowing.”

That a Painter should take pleasure in the Opinions of everybody.

“A painter ought not certainly to refuse listening to the opinions of any one, for we know that, although a man be not a painter, he may have just notions of the forms of men. Now, if we know that men are able to judge of the works of Nature, should we not think them more able to detect our errors?”

Of the Gracefulness of its Members.

"The members are to be suited to the body in graceful motions, expressive of the meaning which the figure is intended to convey. If it had to give the idea of genteel and agreeable carriage, the members must be slender and well turned, but not lean, the muscles very slightly marked, indicating in a soft manner such as must necessarily appear; the arms particularly pliant, and no member in a straight line with any other adjoining member."

Precepts in Painting.

"Perspective is to painting what the bridle is to a horse, and the rudder to a ship."

Of those who apply themselves to the Practice, without having learnt the theory of the Art.

"Those who become enamoured of the art, without having previously applied to the diligent study of the scientific part of it, may be compared to mariners who put to sea in a ship without rudder or compass, and therefore cannot be certain of arriving at the wished-for port. Practice must always be founded on good theory: to this, perspective is the guide and entrance, without which nothing can be well done."

Of those Painters who draw at home from one Light, and afterwards adapt their studies to another situation in the Country.

"It is a great error in some painters who draw a figure from Nature at home, by any particular light, and afterwards make use of that drawing in a picture representing

an open country, which receives the general light of the sky, where the surrounding air gives light on all sides. This painter would put dark shadows where Nature would either produce none, or, if any, so very faint, as to be almost imperceptible; and he would throw reflected lights where it is impossible there should be any."

The brilliancy of a Landscape.

"The vivacity and brightness of colour in a landscape will never bear any comparison with a landscape in Nature when illumined by the sun, unless the picture be placed so as to receive the same light from the sun itself."

Painters are not to imitate one another.

"A painter ought never to imitate the manner of any other; because in that case he cannot be called the child of Nature, but the grandchild. It is always best to have recourse to Nature, which is replete with just abundance of objects, than to the productions of other masters, who learnt everything from her."

Of no other old master do we possess so many manuscripts as of Leonardo da Vinci. In the library of the Institut de Paris, there are fourteen volumes, lettered A to M, which were brought from Italy by the French army under Napoleon. The most famous of all, the 'Codex Atlanticus,' is still in Milan; the only one of which the contents have been partially published. There are other codices in Milan belonging to different private people.

The manuscripts of Leonardo in England are, we may say, as numerous and as important as all the rest preserved in continental collections. Most of them are at

Windsor, others in the British Museum, in the South Kensington Museum, in Lord Ashburnham's collection, and at Holkham. Besides containing materials for the '*Trattato della Pittura*,' they treat of various subjects connected with exact science. The manuscript in the British Museum chiefly treats of questions of a scientific nature. Although the preface which the artist puts at the commencement of the Codex, has reference only to this particular essay, in its main characteristics it may be taken to apply to other manuscripts as well. There we read :

"Begun at Florence, in the house of Piero di Barto Martelli, on the 22nd March, 1505; and this can only be a collection without order, extracted from many papers which I have copied, hoping hereafter to arrange them in their proper order, according to the subjects of which they treat. I expect that before concluding this task I shall have to repeat the same thing more than once, wherefore, reader, do not blame me, seeing that the things are many, and I cannot keep them in my memory, and say, 'This I will not write because already I have written it.' Were I anxious to avoid falling into such an error, it would be necessary for me when about to copy anything, for fear of repetition, to read over all previous matter; particularly considering that long intervals exist between my times of writing."

There is only one reason why so very little is known of his manuscripts: it is the difficulty of deciphering the handwriting. But the reproach that he intentionally kept secret the rich treasures of his studies and discoveries by his peculiar manner of writing from right to left, is certainly an unjust one. The question has already been solved by his friend, Luca Paciolo, in whose *Trattato 'De*

Divina Proportione' the following passages occur; "The geometrical drawings (for this publication) have been made by Leonardo's ineffable left hand (ineffabile sinistra mano), well-schooled in every mathematical exercise. One may write from the left on the reversed plan, so that it becomes impossible to read, unless one uses a mirror, or if one holds the reversed side of the paper against the light, as is my custom. This is the way in which Leonardo da Vinci, the light of the art of painting (lume della pittura) writes, *who is left handed*, (quale è mancino), as I have said several times."

After Leonardo's death, all his manuscripts were brought back by Francesco Melzi to Milan. His anatomical studies, however, were not among these, for as the anonymous biographer states, they were then in the convent of S. Maria Novella in Florence. That their great value was well known to the men of that time is evident from the following letter from Albert Bandidio, the Ferrarese ambassador at Milan to the Duke Alfonso I. at Ferrara. It is dated Milan, March 6th, 1523:

"Melzi, Leonardo da Vinci's pupil, and executor, is possessed of many of his secrets, besides a great number of his memoranda and notes. I have also been told that he paints very well himself. He is a handsome young fellow, with no little skill in conversation. I have several times asked him to come over to Ferrara. . . . I believe that he has got the little manuscripts of Leonardo's on anatomy, besides other charming things."

As long as Melzi was alive, his master's papers were in safe keeping. Of their subsequent fate Lomazzo has told us, when writing about Leonardo's contributions to literature, some fifty years later.

"I have seen at Francesco Melzi's the drawings done by

Leonardo's own hand, in which he explains the anatomy of the human figure and that of the horse. He has also made diagrams of all the different proportions of the human body. There are essays by him on perspective, on light, directions for the construction of figures larger than life-size, and many other writings, specially relating to mathematical questions. Further, there is a method for the easy removal of heavy weights, &c. Of all these things, however, nothing has been printed. The greater portion of his manuscripts is in the hands of Pompei Leoni, sculptor to his Catholic Majesty the King of Spain, who got them from Francesco Melzi's son. Others are in the possession of Dr. Guido Mazenta."*

After many vicissitudes, most of these manuscripts found their way into the Ambrosian library at Milan, where they remained from 1637 until the time of the French Revolution.

It is now no easy task to determine the value of Leonardo's contributions to the science of mathematics. For, in the first place, our knowledge of what he did in this respect is far from being adequate; and secondly, we lack the evidence as to the extent of the knowledge possessed by his contemporaries on this particular subject; so that we cannot tell precisely in what measure he surpassed them. Nevertheless it must be confessed that in more than one field he made discoveries for which those coming after have gained the credit. He was the first to restore those laws relating to the use of the lever, which had been lost since the time of Archimedes, while all those connected with statics and hydrostatics, discovered by Stevinus some century later, were thoroughly understood by Leonardo. According

* 'Del Tempio della Pittura,' p. 17.

to Lombardini,* we must look upon Da Vinci as the originator of the science of hydraulics; he was convinced of the molecular structure of water, and as Cialdi† relates, he had already gained a knowledge of the laws which govern the movements of waves, going so far as to apply these principles to the theory of optics and of acoustics. It was not Cesare Cesarini nor Cardanus, as has been thought, but Leonardo who discovered the camera obscura. He first trod the paths of botany and of physiology, having been a very diligent student of the structure and arrangement of foliage.‡ He is supposed to have been one of the first of European scholars who employed the signs of plus and minus;§ it is not certain, however, whether these may not have had their origin in Arabia. Before Commandin and Autolycus, he calculated the method of finding the centre of gravity of pyramids, while, in more than one geometrical discovery he was in advance of Tartaglia.|| Among his manuscripts there are a number of designs for the construction of machines, many of which are still in use. His saw, for instance, is now employed in the marble-quarries of Carrara; and Grothe assures us that his rope-making machine is even better than the ones now in use.¶

* 'Dell' Origine e del Progresso della Scienza idraulica.' Milano, 1872.

† 'Politecnico,' Milano, 1873, No. 3.

‡ 'Nuovo Giornale botanico,' 1869. 'Gazette des Beaux-Arts,' 1877, pp. 344-354.

§ I confess, in reading Leonardo's manuscripts, never to have met with the sign + in the meaning of plus; he uses this figure when writing the number 4.

|| Libri, 'Histoire des Sciences mathématiques en Italie,' 2^e édition, vol. ii. pp. 10-58, 205-230.

¶ 'Leonardo da Vinci als Ingenieur und Philosoph,' Berlin, 1874.

He was also engaged with plans for the construction of a canal in the valley of the Po, and long after his death the course of the Arno was made to follow the same lines as those which he had originally planned. In France he was occupied with similar problems, even until shortly before his death. According to Sandrart,* he busied himself with the construction of tunnels, and he also submitted plans to the Florentine government for raising the Baptistery of S. Giovanni some feet higher.

Besides hand-power, Leonardo employed both water and steam as motive forces. In the 'Codex Atlanticus' at Milan there is a sketch by him of a steam-cannon, and also a note in which he expresses his firm conviction that with the help of steam, a boat could also be set in motion. In the same manuscript we find even drawings of breechloading cannons.† In addition to all this he yet found time for studying the great authors of the middle ages and of antiquity. This we can see from the following list of books, forming probably his own library, found among his manuscripts, of which we give an extract :

Plinio. (Published in 1476.)

'Bibia.' ('The Bible,' Venetian edition, 1471.)

'De re militari.'

Piero Crescentio. ('De Agricultura.')

Donato. (Published in 1499.)

Justino. (Published in 1477.)

Giovã di Madivilla. (John Maundeville's 'Travels,' Italian edition. 1495.)

'De onesta voluntà.'

* Sandrart, 'Academia Tedesca': "Ut de valle in vallem iter esset."

† I am indebted to Captain A. J. Leeson, who has kindly drawn my attention to this.

Magnanello.

'Cronica Desidero.' (Paulus Diaconus ?)

'Pistole d'Ovidio.' (Italian translation, 1489.)

'Pistole del Filelfo.' (Italian translation, 1484.)

'Spero.' (A cosmography.)

'Facetie di Poggio.' (Poggio Bracciolini of Arezzo.)

'De Chiromätia.' (By Hartlieb ?)

'Formulario di pistole.'

'Fiore di virtù.'

'Vite di Filosiofi.' (Diogenes Laertes.)

'Lapidario.'

'Della cōservatiō della sanità.' (Arnaldo de Villanova.)

Ciecho d'Asseoli. (A poem on astronomy.)

Alberto Magno.

'Rettoricha nova.'

Cibaldone.' (A treatise on hygiene.)

Isopo. (Æsop's Fables.)

'Salmi.' (Psalms.)

'De Immortalità d' Anima.' (Marsilio Ficini.)

Burchiello. (Sonnets.)

Diadeo. (Poems.)

In another place he mentions the following books, which he had borrowed :

From Messer Octaviano Palaviano, the Vitruvius.

From Bestucci Masliaro, 'de Calculatione.'

From Fra Bernadigio, Alberto (Magno), 'de Cœlo et Mundo.'

From Alessandro Benedetto, the book on Anatomy.

From Nicolò della Croce, the Dante.

In one of his manuscripts at the South Kensington Museum he quotes the writings of Hippocrates. Elsewhere we find a quotation from Augustine's 'De Civitate Dei.'

Geoffroy Tory wrote of Leonardo in 1524: "Leonardo da Vinci was not only both an excellent painter and a veritable Archimedes; he was also a very great philosopher."

The following extracts from his writings may serve us in forming a general conception of his philosophical and moral principles.

"Against injustice, long-suffering is as a garment against the cold. For as, where the cold increases, thou should'st double the number of thy wraps, so with the growth of injustice should'st thou enlarge thy forbearance, as by so doing it shall not harm thee."

"Spirit is voiceless, for where there is force there is body and where there is body there is occupation of space Where no movement is, there can be no voice; no percussion of air without some instrument, and no instrument without substance. Spirit can have neither voice, nor form, nor force. Where are no nerves or bones the spirit, as we imagine it, can exercise no motive power."

A pungent epigram, this: "Pharisees, that is to say, friars." In the '*Trattato della Pittura*,' he styles a battle a "bestial frenzy." *

Of existence he writes: "When I thought I was learning to live, I was but learning to die." "Long is that life that is well spent."

"Just as a day well spent gives joyful sleep, so does life well employed give joyful death."

"Deem me not vile because I am not poor. Poor is the man who over much desires." † "Experience never deceives, only man's judgment plays him false." ‡

* "*Pazzia bestialissima.*"

† "Deh! non m'aver a vil ch'io non son povero,
Povero è quel che assai cose desidera."

‡ "*La experientia non falla mai, ma sol fallano i nostri giuditi.*"

Lomazzo has bequeathed to us a sonnet, the author of which, he says, was Leonardo. It is pleasant to think that these were the principles which guided the great painter throughout the course of his most wonderful life. In English we might read them thus :

“ Who cannot do as he desires, must do
What lies within his power. Vain it is
To wish what cannot be ; the wise man holds
That from such wishing he must free himself.
Our joy and grief consist alike in this :
In knowing what to will and what to do.
But only he whose judgment never strays
Beyond the threshold of the right learns this.

Nor is it always good to have one's wish :
What seemeth sweet full oft to bitter turns ;
Fulfilled desire hath made mine eyes to weep.
Therefore, O reader of these lines, if thou
Would'st virtuous be, and held by others dear,
Will ever for the power to do a right.”





APPENDIX.

NOTE 1 (p. 29).—South Kensington Museum also possesses a most interesting early reproduction in terra-cotta of the *Last Supper*. It is a Florentine alto-relievo, enamelled in proper colours (No. 3986, width 5 ft. 4 in.; height 1 ft. 10 in.), and has been ascribed to Andrea or Giovanni della Robbia. It is not without some difficulty that one can recognise in this composition Leonardo's *Last Supper*, because in the relievo copy the composition is shown from the reversed side. The pattern for this was probably an old Florentine engraving, of no great artistic significance. Another engraving of it was produced in the Paduan school, and both are excessively rare. Like the relief in South Kensington Museum, they were probably executed soon after the completion of the original fresco.

In addition to the two preparatory studies for the *Last Supper* mentioned on page 30, I have yet to name a very interesting one at present in the Academy of Venice, in which the master has written the names of the apostles over their several heads. Like all the others, however, this drawing differs considerably from the composition as executed in the fresco.

NOTE 2 (p. 35).—On the same sheet in the Windsor collection, which contains the sketch here given of the Sforza Monument, we find among others the following interesting remarks:—

“ Forma del Cavallo.

“ Fa il cavallo sopra ghambe di ferro ferme e stabili in bono fondamēto poi lo inferra effagli la chappa di sopra lasciando ben seccare assuolo

equesta ingrosserai tre dita dipoi arma efferra secondo il bisogno al modo di questo chava la forma e poi falla grossezza e poi rièpi la forma amezza a mezza coquella integra poi co sua ferri cieroehiala ugnila ellarichiadi dentro dove ad andare il bronzo.

“ Del fare la forma di pezzi.

“Segnia sopra il cavallo finito tutti li pezi della forma di che tu voi vestire tal cavallo e nello interrare li taglia in ogni interratura accioche quanto fu finita la forma chettu lapossi chavare e poi ricomettere al p° locho cholli sua scontri delli contrasegni,” etc. etc.

Space does not here allow me to offer an explanation of these important sentences, which are now for the first time made public. I thus reserve what proofs I may have for a special essay, in which I shall seek to show that these notes of Leonardo's, as also other memoranda made by him in his manuscripts at Windsor, will lead to a different conclusion to that arrived at by M. Courajod respecting the vexed question of the Sforza Monument (*Gazette des Beaux-Arts*, 1877, No. 330-344; *L'Art* 1879, No. 251-254).

NOTE 3 (p. 37).—“ Aprite gli occhi, da cotesta terra non trarrete se non opere di vili e grossi magistri . . . credetelo a me, salvo Leonardo fiorentino, che fa il cavallo del Duca Francesco di bronzo, che non me bisogna fare stima perchè à che fare il tempo di sua vita, e dubito che per essere sì grande opera che non la finirà mai.”

NOTE 4 (p. 60).—“ Ricordo come nel sopra detto giorno io dedi assalaj ducati 2 doro i quali disse volersene fare un paio di calzi rosati cosua furnimentj che restai a dare duchati 9 posto che erami debitore amme ducati 20 coe 18 prestai a Milano e 2 a vinegia.”

NOTE 5 (p. 61).—“ Sopra dellermo fia una meza palla la quale assignificatione dello nostro emispherio in forma di mōdo sopra il quale sia uno paone cholla choda diastesa chi passi la groppa richamente ornato et ogni ornamento che al cavallo sapartiene sia di pene di paone in champo doro assignificatione della bellezza che risulta della gratia che viene da quello che ben serve.

“ Nello schudo uno speechio grande assignificare che se uol fauori si specchi nella sua virtù.

“ Dalloposita parte fia similamente chollochata la forteza chola sua

chollona ifiano vestita di bianco che significa e tutti coronati—e la prudentia con tre occhi—la sopraveste del cavallo sia da semplice oro tessuto seminata di spessi occhi di pagomi ecquesto siano di pertutto.

“Dallato sinistro fia una rota il cierchio della quale sia cholocata alla coscia di dietro del chavallo per la cavita e al detto cierchio apparia la prudentia vestita di rosso sedente in focosa chadriga e un ramicello di laro ifian alsignificazione della speranza.

“Et in somma fu fatto alcuna chosa.”

NOTE 6 (p. 69).—“Ricordo come addi 8 daprile 1503 io lionardo da vinci prestai a Nani Miniatore ducati 4 doro innoro portogli salai e dette in sua propria mano disse rendermili infra losspatio di 40 giorni.”

NOTE 7 (p. 87).	fr.
“Spese per la (mor) sooteratura di caterina . . .	27
Lib 2 di cera	18
Per lo catalecto	12
Portatura e postura di croce	4
Per la portatura del morto	8
Per 4 preti e 4 cerici	20
Campana li sponge	2
Per li soeterratori	16
Allätiano	8
Per la liciëtia ali oficialj	1
	<hr/>
	106
In medico	4
Zuchero e càdele	12
	<hr/>

122”

NOTE 8 (p. 95).—“Adi 16 di dicembre dove fu applicato il fuoco.

“Adi 18 di dicembre 1511, a hore 15 fu fatto questo secondo incendio da svizeri psto a Milano al luoco dicto.”

NOTE 9 (p. 104).—“What shall I say of Leonardo da Vinci, whom the King of France treated with such honour, that he appointed noblemen clad in silk and brocade to wait upon him. So great was the monarch's love for him, that in his sickness he visited him, and

supported him when he lay a-dying in his arms. Thus did this famous painter breathe his last upon the breast of the King. Honours such as there are not for Portuguese artists."—Francesco d'Olanda's *Work on the Old Masters*, 1549. See A. Raczynski, '*Les Arts en Portugal*,' Paris, 1846, p. 60.

NOTE 10 (p. 113).—"I muscoli che movano soltanto il piede nello alzare dinanzi sono f. m n nati nella gamba dal ginocchio in gu equesti chelli piegano inversola . . . di fori son li muscoli f. u.

"Quale nervo a chagione del moto dellochio affare chel moto del-lunochio tiri laltro; del chiudere le ciglia; dello alzare le ciglia; dello abbassare le ciglia; dello chiudere li ochi: dello aprire liochi, etc.

"Adi 2 daprile 1489 libro titolato di figura umana.

"Eccosi piacesse al nostro alto re che io potessi dimostrare la natura dellj omini e loro costumi nel modo che io desscrivo la sua figura."





CHRONOLOGY OF LEONARDO DA VINCI.

- 1452 Born at the Castle Vinci, 4.
1470 (about). He enters the studio of Verrocchio, 7.
1472 Member of the Guild of Painters at Florence, 7.
1480 Commissioned to paint the *Adoration of the Kings* for San Donato at Scopeto (now in the Uffizi at Florence), 9-10.
1482 (about). Settles down at Milan, 16.
1489 He begins the 'Treatise of the Human Figure,' 113.
1490 April 23, he recommences the Equestrian Statue, and begins the 'Treatise on Light and Shadow,' 31.
1493 The Model of the Sforza Monument exhibited at Milan, 37.
„ March 6, the German Julio enters his studio, 50.
„ March 24, Galeazzo enters his studio, 50.
1595 June 30, at Florence, Member of a Commission, 70.
1497 Lodovico Sforza urges Leonardo da Vinci to complete the *Last Supper*, 18.
1498 The *Last Supper* completed, 19.
1499 April 25, Ludovico Sforza gives him a vineyard, 54.
1500 March 13, visits Venice, 57-58.
1501 April 4, at Florence, 63.
1502 Cesare Borgia's Decree nominates Leonardo his engineer, 64.
„ July 30, at Urbino, 66.
„ August 1, at Pesaro, 67.
„ August 8, at Rimini, 67.
„ August 11, at Cesena, 67.
„ September 6, at Cesenatico, 67.
1503 April 8, at Florence, 69.

- 1504 Jan. 20, member of a Commission at Florence, 74.
„ and 1505. Prepares the Picture for the Battle of Anghiari, 75.
„ August 3, Jacopo the German enters his studio, 91.
1505 April 14, Lorenzo enters his studio, 91.
1506 Leaves for Milan, 91.
1507 Two journeys to Florence, 94.
1508 Oct. 12, back to Milan, 94.
„ March 22, at Florence in the house of Piero di Barto Martelli,
94, 121.
1511 In the Spring, at Florence, 94.
„ In December, at Milan, 95.
1514 Sept. 24, leaves Milan for Rome, 96.
„ Sept. 27, at S. Angelo on the Po, 96.
1515 At Rome, 97.
„ In the Autumn, with Francis the First in Northern Italy, 103.
1516 In France, at the Château Cloux, near Amboise, 103.
„ April 23, he makes his will, 104.
1519 May 2, dies, 104.
„ August 12, buried in the Royal chapel at Amboise, 106.





LIST OF LEONARDO DA VINCI'S PICTURES AND SCULPTURES.

I. PICTURES.

First Period, 1490-1500.

- Florence In the Academy of Fine Arts, *The Baptism of our Lord* (on panel) by Verrocchio—finished by Leonardo, 6-7.
Florence . . . Uffizi, *Adoration of the Kings* (on panel), 9-10.
Rome . . . Pinacoteca of the Vatican, *St. Jerome* (on panel), 10.
Milan . . . Refectory of Sta. Maria delle Grazie, *Last Supper* (wall-painting), 17-26.
London . . . Royal Academy, *Virgin with Holy Infant, St. Anne, and St. John*, 72-3.

Second Period, 1500-1519.

- Paris . In the Louvre, Portrait of *Mona Lisa*, 88-89.
Charlton Park Lord Suffolk's Collection, *Madonna, Infant Christ, St. John and an Angel* (on panel), 99-100.
Paris . In the Louvre, *Vierge aux Rochers* (on panel), 100.
Paris . . . Louvre, *St. Anne* (on panel), 100-102.
Paris . . . *St. John the Baptist*, 102.

II. LOST PICTURES.

First Period, 1470-1499.

- Adam and Eve in Paradise (water-colour), 7.
A Monster (on a Shield), 8.

- The *Medusa*, 8.
The *Madonna with the Bottle* containing Flowers, 8.
Neptune (cartoon), 8-9.
Altar Piece for the Palazzo Publico, 9.
Birth of Christ, for the Emperor Maximilian, 16.
Portrait of Lucrezia Crivelli, 43.
Madonna (the portrait of *Cecilia Gallerani*) and *Infant Christ*
43-44.
Annunciation of the Virgin, in the Church of St. Francesco at Milan,
44.

Second Period, 1500-1519.

- Portrait of Isabella Gonzaga*, 57-59.
The *Madonna with the Spindle*; for Robertet, 63-64.
The *Battle of Anghiari*, 75.
Portrait of Ginevra Benci, 89.
Two *Madonna* Pictures, destined for Charles d'Amboise, 94-95.
Portrait of a Child for Baldassare Turini, painted at Rome, 98.
Madonna and Child, for Baldassare Turini, painted at Rome, 98.
Leda, 103-104.
Pomona, 103-104.

III. LOST SCULPTURES.

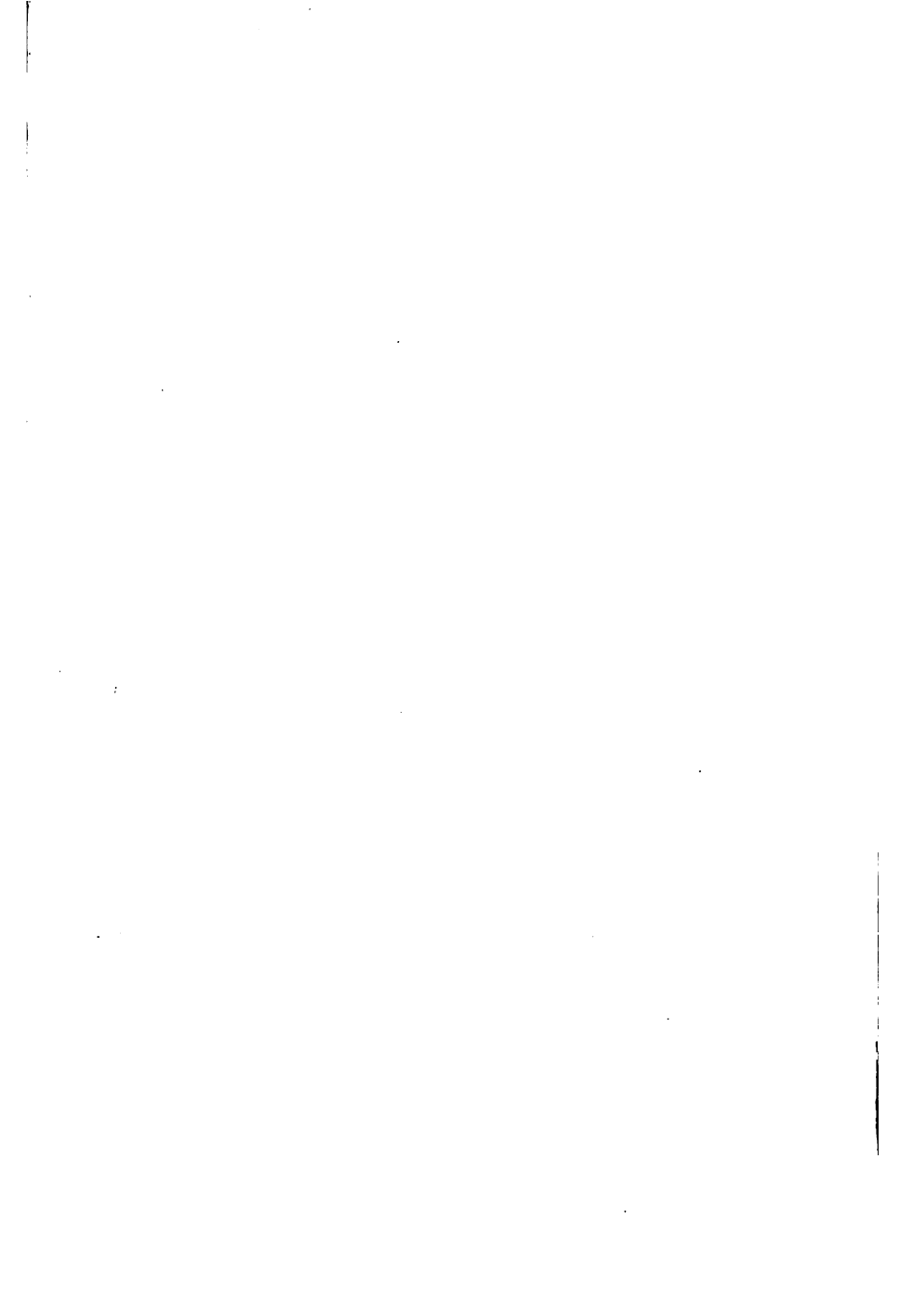
- Heads of Women and Children (in terra cotta and gypsum), 11.
Statue of Francesco Sforza, at Milan, 31-39.
Head of Christ (in terra-cotta), 45.
Bas-relief of a Horse, 45.



INDEX OF NAMES AND PLACES.

	Page		Page
Albertini, Memoriale	80	Francesco d'Ollanda	104, 110
Alfonso, Duke of Ferrara . . .	122	Francis I.	39, 101, 102, 105
Amboise	103, 106	Galeazzo, Gian	13
Amboise, Charles d'	92, 94-95	Gallerani, Cecilia	43
Anonymous Biographer	4	Ghirlandajo, Ridolfo	90
Ashburnham's, Lord, Collection	121	Ginevra, wife of Benci	89
Bandello, Baccio	19	Giotto, Leonardo da Vinci's sentence on	3
Bandinelli, Baccio	90	Giovio, biographer	4
Bartolommeo, Fra	90	Giuliano da San Gallo	70, 74
Beatrice d'Este	45	Gonzaga, Isabella	57-59, 62-63
Beltraffio, Antonio del (pupil)	50, 96, 98	Grimani, Antonio	60
Borgia, Cesare	64-66	Gualtieri, Messer	44
British Museum, <i>see</i> London.		Holkham	121
Catarina, Mother of Leonardo da Vinci	4, 87	Ipolito d'Este	93, 94
Cellini, Benvenuto	82, 113	Isabella Gonzaga	57-59, 62-63
Cesare da Sesto	52	Jacopo the German (pupil) . .	91
Cesena, journey to	67	Julio the German (pupil) . .	50
Cesenatico, journey to	67	Kardi, Jafredus	79
Charlton Park, Picture at . . .	100	Leo of Arezzo	45
Chiusei, journey to	67	Leo X., Pope	96-98
Cloux, Château	103	Lippi, Filippino	9, 73
Credi, Lorenzo di	5, 8	Lisa, Mona	48, 58
Crivelli, Lucrezia	43, 59	Lomazzo	51, 109
Donatello	33	London, British Museum . . .	44, 46, 52, 54, 60-62, 69, 82, 91, 94, 104, 120
Edelinck, Gerard	80	London, National Gallery . .	49, 50
Ercole of Ferrara	37, 38	London, Royal Academy . . .	26, 73, 101
Fanfoia (pupil)	96	London, South Kensington Museum	45, 50, 60-62, 63, 82, 91, 94, 104, 120
Ferrando the Spaniard (pupil)	90	Lorenzo il Magnifico	1, 12, 96
Ferronière, La Belle	59		
Florence, Pictures at	7, 9		
Foligno, journey to	67		
Francesco di Giorgio	40		

	Page		Page
Lorenzo di Pavia	58	Raffaello d' Antonio di Biagio	90
Louis XII. of France 27, 37, 39, 92		Raphael	108
Lucensi, engraver	80	Riccio di Santa Croce (pupil)	90
Luini	26, 49, 102	Rimini, Journey to	67
		Robertet	63, 64
Martelli, Piero di Bartolo 94, 121		Rome, Journey to	69, 96
Masaccio, Leonardo's opinion of 3		Rome, Vatican Library	113, 114
Maturina	103	Rome, Vatican Pinacoteca	10
Maximilian, Emperor	16, 37, 55	Rouen, Cardinal of	38
Medici, Giuliano de'	96, 97	Royal Academy, <i>see</i> London.	
Medici, Lorenzo de	1, 12, 96	Rubens	26, 80
Melzi (pupil)	51, 96, 105, 122, 123	Rustici (pupil)	89-90
Michelangelo 12, 61, 74, 75, 96, 108		Salai	50, 51, 60, 62, 94, 96, 105
Milan, Ambrosian Library	123, 125	Savonarola	70
Milan, Brera	28	Sforza, Francesco	31, 39
Milan Cathedral	41	Sforza, Lodovico 12, 13, 18, 54-56	
Milan, San Francesco	44	Sforza, Maximilian	95, 96, 103
Milan, S. Maria delle Grazie, Refettorio	17, 21	Siena, Journey to	67
Morghen, Raphael	18, 26	Soderini, Piero	79-80
		South Kensington, <i>see</i> London.	
Nanni, Miniature-Painter	69	Stange, Marchesino	18
National Gallery, <i>see</i> London.		Turin, Royal Library	100, 107
Nuvolaria, Petrus de	62-63	Turini, Baldassare	98
Oggionno, Marco d'	25, 26, 50	Urbino, Journey to	66
Orvieto, visited by the artist	67	Vasari, Life of Leonardo da Vinci	3, et passim
Paciolo, Luca	19, 50, 69-70, 89	Venice, Academy	46, 47
Pandolfini	92-93	Venice, Journey to	57-64
Paris, Institut de France	120	Verrocchio,	5-7, 33, 62
Paris, Louvre	30, 45, 50, 59, 88-89, 100-102	Vilanis, Battista de	103, 105
Pavia, Journey to	40	Vinci, Giuliano da	105
Perugia, Journey to	67	Vinci, Piero Antonio da	4, 87
Pesaro, Journey to	67	Weimar, Collection of the Grand Duchess of	28
Pietrini (pupil)	26	Windsor, Royal Library	10, 28, 30, 33, 46, 50, 62, 67, 68, 95, 100, 112, 120
Piombino, Journey to	67	Zoroastro of Peretola	50
Pontormo	90		



89054197272



89054197272